

## Capstone Proposal — Marcia Gray

For Spring 2023 Capstone

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### 1. Project scope

#### 1.1. Project title

Critical Thinking Cap: An e-learning website offering informal lessons and activities on discerning, developing, and deploying critical thinking skills

#### 1.2. Capstone category and related courses

Capstone category: Web development

*Courses directly related to the capstone category*

- CSCI E-34 User Experience Engineering
- DGMD E-20 Modern and Mobile Front-End Web Design I
- DGMD E-23 Planning Websites and Applications
- DGMD E-27 Modern and Mobile Front-End Web Design II
- DGMD S-61 Working with Educational Technologies

*Additional courses that may inform the project*

- DGMD E-60 Designing Online Courses
- EDUC E-103 Introduction to Instructional Design
- EDUC E-113 Instructional Design Studio

#### 1.3. Project goal

Critical thinking is of great importance in the decision-making process and as individuals increase their critical thinking capacities, their decisions will yield more positive results for themselves. (Turan et al., 2019)

Everyday we are bombarded by ideas, images, and information from myriad sources, including people we know, shows we watch, and forums we monitor or participate in. Critical thinking skills help us separate sound information and arguments from the misinformation, spin, and misrepresentations hurled at us from outside sources—or generated in our own minds. Without these vital skills, we cannot acquire the knowledge we need to make sound decisions or form logical opinions. Critical Thinking Cap will provide learners an inviting and engaging space to learn and practice critical thinking skills at their own pace at their convenience, without having to enroll in a weighty, bland, or expensive college course.

## 1.4. Learning goals

During the completion of this project, I plan to develop the following skills:

- Creating a full, functional website using WordPress
- Installing and deploying a learning management system (LMS) within a website
- Using a page-builder plug-in (such as Elementor) to develop the website to customized design specifications
- Developing curricula and courses for adult learners and perhaps those still in high school
- (*Side effect*) My own critical thinking skills, especially those that will be covered in the sample course(s)

## 1.5. Elevator pitch

We live in an age of digital and universal media, with an often instantaneous and unremitting dissemination of information good and bad. Without critical thinking skills, we cannot reliably decide for ourselves what information to embrace, ignore, or refute. My project, Critical Thinking Cap, will be an e-learning website, built using WordPress and the LearnDash LMS plug-in, that will guide adult learners through a fun, casual critical-thinking course inspired by the principles of microlearning.

## 1.6. Target audience

### 1.6.1. Statistics

I anticipate the majority of potential users would be adults in the United States, with secondary markets in Canada, the United Kingdom, and Australia. These adults would need access to the Internet via a smartphone or other device. How many of these potential users can be reached by marketing or word-of-mouth and become real users? That remains to be seen, but for now I am estimating around 1.5 million, as calculated in the following table.

<b>Adults accessing the Internet: United States, Canada, England and Wales, and Australia</b>	
<b>United States</b>	
Adults (18 and over) <sup>1</sup>	258,327,312
Adults with smartphone ownership (85%) <sup>2</sup>	<b>219,578,215</b>
Adults with home broadband (77%) <sup>3</sup>	198,912,030
<i>Note: The study consulted did not address overlaps in the smartphone and broadband statistics; so I will use just the smartphone statistic in my calculations below.</i>	
<b>Canada</b>	
Adults (15 and over) <sup>4</sup>	30,979,190
Personal Internet use from any location, 15 years and older (92.3%) <sup>5</sup>	<b>28,593,792</b>
<b>England and Wales</b>	
Adults accessing the Internet, September 2020 <sup>6</sup>	<b>45,500,000</b>
<b>Australia</b>	
Adults (15 and over) <sup>7</sup>	20,784,782
Active Internet users, no age range specified (91%) <sup>8</sup>	<b>18,914,152</b>
<b>Total adults accessing the Internet: US, Canada, England and Wales, and Australia</b>	
<b>Estimate of total potential users of Critical Thinking Cap</b>	<b>312,586,159</b>
<b>If, say, 0.5% of potential users are reached by marketing or word-of-mouth, actual users could hover around the 1.5 million mark.</b>	<b>1,562,930</b>
1. U.S. Census Bureau, 2021 2, 3. Perrin, 2022 4. Statistics Canada, 2022 5. Statistics Canada, 2021 6. Office for National Statistics, 2022 7. Australian Bureau of Statistics, 2022 8. Statista Research Department, 2022	

## 1.6.2. Three personas and empathy maps

### Persona 1: Jessica — Young mom on a mission



- 32-year-old female
- Education: BA
- Occupation: Nurse
- Family: Married with one toddler

*"It's a scary world out there; I think I need help navigating it all so I can in turn find safe, meaningful paths for my daughter."*

#### Goals and needs

- She values security, safe home environment, mental and physical health.
- Wants to start her daughter's education on the right foot, wants to be a stellar role model.
- Needs help navigating all the missives she finds on social media, in the news, and in the break room.
- Seeks guidance on how to trek through the mire and also pass good thinking skills on to her kid(s).

#### Motivations

- Health and happiness for herself and her family.
- Wants to be the best nurse she can; aspires to head nurse and beyond.

#### Frustrations

- There's never enough time, money, or cute little t-shirts for her daughter.

#### Everyday activities and responsibilities

- Work, work, and work: A nurse's hours are long; the shifts are exhausting.

#### Devices and Internet usage

- Uses her cell phone for most everything, including changing the big-screen-TV's channel.
- Amazon's Alexa is like a close friend.
- Loves apps, though admits she should delete some time-hogging and addictive entertainment-only apps.
- Bad UI doesn't deter her from exploring or using apps and websites.
- Hasn't used a desktop computer much since graduating college.

#### Learning preferences

- Likes to hash out ideas out loud with other people.
- Prefers "quick bites" she can access and digest as her time permits.

### Empathy map: What this persona . . .

#### . . . thinks and feels

- "I could use some help deciding what's best for me and my family."
- "I love having fun but I need to 'nurse' my serious cerebral side."
- "My brain is all over the place. I'd like to feel more grounded."

#### . . . hears

- Politicians and others addressing the public using angry, vitriolic speech.
- Relatives and coworkers mindlessly repeating everything they hear on TV.



#### . . . sees

- Educational apps her daughter could be using in the months and years ahead.
- Coworkers absorbed in online courses during breaks.

#### . . . says and does

- Often mindlessly wastes hard-to-find spare time on vapid apps.
- "Too many board books! I need something to engage my brain!"
- "I want a fun app that teaches me something useful."

Photo by Manuel Alejandro Leon from Pixabay.

## Persona 2: Margaret — Concerned cynic seeking self-improvement



- 55-year-old female
- Education: BA, in MA program
- Occupation: Designer
- Family: Married with two cats

*“All the false rhetoric about fake news and stolen elections really scares me. I want to be part of the solution but I have trouble articulating the problem.”*

### Goals and needs

- Wants to up her critical thinking skills so she can better participate in political discourse and activities.
- Needs to improve her writing and reasoning skills so she can create and maintain a fair and unbiased blog (to the extent possible.)

### Motivations

- Often driven by desire to learn new things, especially via books, museums, or interactive websites.
- Just wants to do the right thing for herself and for others.

### Frustrations

- Though she really wants to learn all she can about critical thinking, she laments about how useful acquiring such skills would really be if most people don't have or use these skills.
- She's never confident about decisions she makes; always doubting herself.

### Everyday activities and responsibilities

- Can just sit and think for hours about almost anything.
- Does *The New York Times* crossword online every day without fail. Also uses Duolingo daily and keeps up a daily minimum of lessons.

### Devices and Internet usage

- Prefers the desktop versions of apps but does use apps on iPad and phone.
- Uses cell phone mostly for texting and e-mail; needs to make text “large.”
- Loathes bad UI. If she feels the UI not intuitive or is just wacky, she often aborts rather quickly.

### Learning preferences

- Loves multimedia.
- Is a sucker for maintaining “streaks.”
- Prefers guided lessons; doesn't like having to jump around or follow too many hyperlinks.

## Empathy map: What this persona . . .

### . . . thinks and feels

- *“How do thoughts spread and become entrenched in people's minds?”*
- *“I wish everybody were aware of all the misinformation swirling around them.”*
- *“I'd like to help people understand things better.”*

### . . . hears

- *Way too much gossip and sensationalized stories . . . on what's supposed to be trustworthy news media.*
- *Ads, political speeches, employer mumbo jumbo. All sides trying to get her attention, support, money, etc.*



### . . . sees

- *Myriad books about critical thinking; the choices are overwhelming!*
- *There are many tempting college courses on critical thinking, but they seem really intimidating and costly.*

### . . . says and does

- *Often asks people to “please give it more thought.”*
- *“What happened to cordial, intellectual debate and reasoning?”*
- *Tries to see more than one side of an issue but admits it can be challenging. How can she open her mind more, she wonders.*

*Photo by rawpixel.com - stock.adobe.com.*

## Persona 3: Brandon — Busy engineer new to the workaday world



- 24-year-old male
- Education: BS, computer science
- Occupation: Software engineer
- Family: Single

*"I'm asked a lot about 'critical thinking skills' during interviews and other work-related meetings but I'm not sure what they are. I need to find out STAT."*

### Goals and needs

- Needs to learn more about those "critical thinking skills" employers and coworkers keep talking about.
- Wants to keep both sides of his brain happy; doesn't want to become too mired in computer code.
- Wants to be able to better explain his programs and systems to coworkers and get them on board with his ideas.

### Motivations

- Career and salary growth, including getting into management.
- Being able to prove and/or articulate what he has learned or how he has grown.

### Frustrations

- Has so many things he wants to do and learn; has trouble prioritizing things and organizing his time.
- Finds it hard to know who to trust and who/what to be leery of.

### Everyday activities and responsibilities

- Working 9 to 5, sometimes longer. Sometimes on weekends.
- Tries to cook healthy meals and workout regularly.

### Devices and Internet usage

- "You can never have too many monitors." (At least while programming.)
- When not working, prefers curling up with laptop or tablet. Browses news and social-media sites.
- Cell phones and their apps are convenient, but their small size is limiting. That said, he loves his smartwatch.

### Learning preferences

- Depends on the nature of the course, his schedule, and whether or not it is a technical, complex subject.
- He prefers to devote good chunks of time to studies as opposed to a quick read here and there.

## Empathy map: What this persona . . .

### . . . thinks and feels

- Feels he's already outgrown his entry-level job; unsure how to position himself for promotions, etc.
  - "I hate being a junior-level employee."

### . . . hears

- Co-workers arguing about various things—some more convincingly than others—but it's hard to know who has the more valid argument.
- His boss encouraging him to consider some writing and reasoning training.



### . . . sees

- Co-workers getting more interesting work, promotions, etc.
- Trainings available through his employer for various professional skills, including critical thinking skills, though these seem rather brief and limited.

### . . . says and does

- Googles "critical thinking skills" and also browses his local library's website on the topic.
- Tries a few related courses on LinkedIn Learning and similar sites but they are a little too corporate-focused for him right now.

*Photo by Miguelangel Miquelena on Unsplash*

## 1.7. Metrics and rubric table

	Minimum Viable Product	Matches the State of the Art	Exceeds the State of the Art
<b>Website design</b>			
<b>Look and feel, tone of text and imagery (as judged by homepage)</b>	The homepage contains all the expected elements.	Through appropriate design and verbiage, homepage is inviting and well represents the purpose of the website.	The homepage design, though innovative, is inviting and representative of the purpose and scope of the website.
<b>Branding</b>	The same colors and fonts are used throughout the website.	Site logo, colors, typography, and editorial tone are consistent throughout the site.	Site logo, colors, typography, iconography, imagery, and editorial tone are distinctive and are as consistent as possible throughout site.
<b>Device compatibility</b>	The website works well and page design holds up when used on modern desktop browsers.	. . . modern desktop browsers and tablets.	. . . modern desktop browsers, tablets, and cell phones.
<b>Deployment of WordPress and the LearnDash LMS and (if used) page-builder plug-ins.</b>	The website has multiple pages and houses a basic functional course. Minimal design modifications are made to an existing theme.	Most popular or expected course elements are effectively integrated in course; existing theme customized to meet brand specifications.	Course includes a variety of popular and novel elements. Site design built from scratch or from a minimalist theme using Elementor.
<b>User interface, user experience, and technical issues</b>			
<b>User interface</b>	Users can figure out how to do most basic tasks.	UI is familiar and relevant, anything novel or potentially unclear is explained or pointed out.	UI has both useful and familiar elements as well as insightful and effective innovative elements.
<b>Loading of pages and page elements</b>	Pages load.	Pages load relatively smoothly and quickly; some images or features may be slower to load.	Pages load reasonably smoothly and quickly on most devices regardless of content.
<b>Instructional design</b>			
<b>Learner engagement: Static, dynamic, and interactive content</b>	Course content is understandable and logically organized. Quizzes are given throughout the course.	Quizzes are fun, inviting, and varied (i.e., they go beyond the usual multiple-choice structure).	Activities go beyond rote quizzes and include interactive thought exercises and/or games.
<b>Learner engagement: Incentives, gamification, completions</b>	No progress tracking is available other than the default UI.	Progress tracking is more robust than default UI.	Badges, certifications, and/or gamification is used to track and incentivize progress.

## **1.8. Industry collaborator**

### **1.8.1. Introduction to industry collaborator**

Gary Gray is a technical writer and web developer who can advise me not only on writing and UI/UX, but also on the technical aspects of creating and maintaining a website (front end and some back end) and using WordPress. Because he is an avid proponent of critical thinking and reasoning skills, he is a suitable choice for testing and providing feedback on subject-matter issues as well.

### **1.8.2. Ten questions for collaborator**

1. Are the pages and course elements loading and behaving appropriately across devices?
2. Is the UI straightforward? Do the buttons, links, and controls behave as you would expect them to or take you to where you would expect them to?
3. Does the organization/structure/navigation of the site and course content make sense to you?
4. Is the type easy enough for you to read and the buttons, icons, and links easy to tap on the various devices?
5. Some pages are loading in an odd way. What might be causing this? How might this problem be fixed?
6. Is this a course you would enjoy taking on your own? Would you find it useful? Whom would you recommend the finished course to?
7. Which concepts of critical thinking would you prioritize? Or, more specifically, which fallacies or biases would you include in early lessons?
8. Do the quizzes work well? Are they enjoyable and engaging? Do you find them potentially useful in reviewing or reinforcing what was presented in the lessons?
9. Is the progress-tracking functioning and related UI easy to understand? Is it accurate?
10. Is the visual design inviting and/or engaging? Has the branding been applied consistently and effectively?

## **1.9. Life of the project beyond capstone**

First and foremost, this project would serve as a highlighted portfolio piece as I search for gainful employment after I graduate. I'll be straddling the realms of visual design, web design, and instructional design; this capstone project should deftly demonstrate my skills in each of these realms.

Alas, the site will be costly to maintain as the domain name and many of the plug-ins I will be using demand annual fees. So I may have to resort to recording some demos, taking some screenshots, and then dismantling the site if I cannot afford to maintain it. Ideally, some lucky learners will find this site, enjoy it immensely, tell their friends, and everybody could help fund it. From there, as time permits, I could grow the course content to the point it becomes a popular and successful mainstream course on critical thinking (and perhaps even pull in enough revenue to make it a lucrative side gig).

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## 2. Competitor review

### 2.1. Competitor profiles

#### 2.1.1. Evaluating the Effectiveness of Arguments, i.e., Identify Fallacies

<https://www.texasgateway.org/resource/evaluating-effectiveness-arguments-ie-identify-fallacies-english-iii-reading>

“Evaluating the Effectiveness of Arguments . . .” is an interactive webpage developed by the Texas Education Agency to introduce students to the topic of fallacies, including examples and activities.

#### Pros

This learning resource’s verbiage and activities are thoughtfully written, offering a lively introduction to logical fallacies. It briefly presents eleven different fallacies, which could be overwhelming to the uninitiated, but the tight, brief descriptions should help learners get the gist of things. The thought (noninteractive) exercises are of appropriate length and complexity. The interactive activities include matching exercises, which is a nice change from multiple-choice quizzes. In most of the quizzes, instant feedback is given as to the correctness of the response and, if incorrect, why the response is incorrect.

#### Cons

This work is called a “lesson,” though it really doesn’t form part of an actual course. Rather, it fits within Texas’s Grade 11 English III curriculum. The discussion of each fallacy is just one or two lines; the examples that come with each discussion are also one-liners. The quizzes are useful in helping solidify what the learner has just read, but they could be more engaging and visually inviting. The thought exercises rely on classic works (e.g., *The Crucible* by Arthur Miller); using examples from current events or world history may be more meaningful to students, especially those without a robust literary background.

The lesson’s UI is uninspiring; the type size of the main text is very small; only one of the graphics provided helps to illustrate a point. The website is not responsive; though text will reflow to fit the screen, the interactive activities will not resize for smaller screens or browser windows.

Evaluating the Effectiveness of Arguments, i.e., Identify Fallacies (English III Reading)

**SECTIONS**

- Introduction
- Identify Fallacies in Short Examples
- Hunt the Wild Fallacy
- Analyze Effects of Fallacious Thinking on Those Who Are Different
- Test Your Understanding
- Resources

- **Red herring:** An argument that uses misleading or unrelated evidence to support a conclusion.
  - I shouldn't have to pay a fine for running a red light. Many other people who are thieves and murderers are out there driving, and the police should be after them, not a decent citizen like me.
  - The level of mercury in seafood may be unsafe, but what will fishermen do to make a living?
  - I know I forgot to deposit the check into the bank yesterday. But nothing I do pleases you.
- **Slippery slope:** A conclusion based on the premise that one thing will lead to another, oftentimes with disastrous results.
  - If I get a B in high school, I won't get into the college of my choice and will never have a meaningful career.
  - If we ban SUVs because they are bad for the environment, eventually the government will ban all cars. So we should not ban SUVs.
  - We've got to stop the electric rate increase. Before we know it, they'll charge us \$100 per minute!
- **Stereotyping:** A fallacy in which one classifies a person or group according to a common aspect that is oversimplified, rigidly applied, and often uncomplimentary.
  - All librarians are shy and wear horned-rimmed glasses.
  - People who live in cities are unfriendly.
  - All blondes are dumb.

In the exercises below, match the examples with the correct fallacies. Keep in mind that some of the fallacies are very similar to each other. You can always look back to the definitions and examples to help you decide.

**Logical Fallacies**

<input type="text"/>	He went to the Mexican food restaurant three nights in a row, so he must love Mexican food.
<input type="text"/>	Either we ban all Chinese imports, or America's economy will collapse.
Stereotyping	Women are too emotional to fight in combat.
<input type="text"/>	The overcrowded conditions in some parts of our city have forced people together like rats in a cage. Like rats, they will eventually turn on one another, fighting and killing until a balance is restored.
Red Herring	The mayor has proposed building a multi-million-dollar, Formula One race track near the airport. How can he even consider such an expensive project when professional car racers already make so much money?
<input type="text"/>	If we ban the burning of the U.S. flag, next we may find laws against burning the presidential seal, state flags, and the Constitution.

Hasty Generalization	Slippery Slope	Either / Or
		False Analogy

Red Herring: The focus of this argument should be on the merits of the race track rather than on the irrelevant issue of how much money car racers make. Correct!

OnTRACK

## 2.1.2. Think Again: How to Avoid Fallacies

<https://www.coursera.org/learn/logical-fallacies>

“Think Again: How to Avoid Fallacies” is an online college-level course, by Duke University and offered via Coursera, that is based on a series of recorded lectures.

### Pros

The course is an online version of a comprehensive (and seemingly well-designed and organized) in-person on-campus course. Because it deploys Coursera’s powerful learning management system, the organization of the course content is clear and UI that guides the

learner along and shows their progress is straightforward. The lecture videos are well-produced and transcripts are provided. The learner can download both the videos and transcripts. Practice quizzes and discussion prompts are frequent. Users are invited to set a weekly learning goal; this could help motivate the learner to regularly check-in with the course. The course is free, albeit for a limited amount of time.

## Cons

The course website itself is not visually engaging. The prerecorded lecture content is basically a talking head in front of text-based slides. The course's webpages display nothing to

The screenshot shows a web browser window displaying a Coursera course page. The browser's address bar shows the URL: `coursera.org/learn/logical-fallacies/lecture/lcpl/fairness-slippery-slopes`. The Coursera logo is in the top left, and a search bar is next to it. The user's name, Marcia Gray, is in the top right. The page content is organized into a sidebar on the left and a main content area on the right. The sidebar lists course sections: 'Introduction', 'Fallacies and Paradoxes of Vagueness', 'Slippery Slopes', and 'Ambiguity'. Under 'Slippery Slopes', several items are listed, including videos and practice quizzes. The main content area features a large video player with a blue background and white text. The video title is 'Fairness Slippery Slopes'. The video content shows a slide with the title 'Definition' and the text: 'A fairness slippery slope argument is one that exploits the vagueness of a category to argue that it is unfair to treat cases that fall into a category differently from cases that do not fall into that category.' Below the video player, there are options to 'Save note' and 'Download'. A transcript section is visible below the video, with a language dropdown set to 'English' and a 'Help Us Translate' link. The transcript text includes: '0:04 In the last lecture we saw how the phenomenon of vagueness gives rise to a kind of fallacy that we called a conceptual slippery slope.', '0:13 Today we're going to see how that same phenomenon of vagueness gives rise to another kind of fallacy. This kind of fallacy we're going to call the fairness slippery slope. It's also kind of slippery slope argument, but it concerns fairness.', '0:28 Okay, so what's a fairness slippery slope argument?', and '0:31 Well, here's the definition. A fairness slippery slope argument is one that exploits the vagueness'.

distinguish this course from any other, nor does it offer any visual clues as to its content. In other words, the course's presentation has a bland, institutional feel that belies its rich subject matter. In fact, if it weren't for the lecture videos, the course would be mostly text.

Despite the presence of short multiple-choice quizzes throughout; there could be many more activities and progress checks (in variety as well as quantity) to help learners consolidate what they have learned. Also, the course could be even more interesting if more of the examples of the issues discussed could be taken from real life.

The course's discussion prompts don't seem to prompt much discussion: Most indicate a very low participation rate (that is, each prompt comes with a usage note such as "14 learners have submitted a response.") Though there are also some discussion forums that seem to get more use, most responses therein average about five words each or fewer. This could be because there may be little incentive given for participating in discussions.

This course is offered for free only for a limited amount of time (which seems to vary from one week to one month once enrolled).

### **2.1.3. PHIL102: Introduction to Critical Thinking and Logic**

<https://learn.saylor.org/course/view.php?id=410>

"PHIL102: Introduction to Critical Thinking and Logic" is an online course by Saylor Academy, an organization offering free online courses for all.

#### **Pros**

This course has an abundance of information to offer, much of it curated from outside sources; this mix of outside sources can provide a stimulating mix of formats and teaching and writing styles. The course is free and offers a certificate upon completion.

#### **Cons**

As with the Coursera course introduced above, Saylor Academy courses have a clean but bland institutional feel. Progress checks are merely rote quizzes, and there seems to be no opportunities for students to formally think about or apply what they have learned outside of several active discussion forums.

The learning management system's UI for keeping track of progress requires learners to check progress unit by unit; there doesn't appear to be an at-a-glance way to check course-wide progress other than a hard-to-find graphic grid buried within the "certificate final exam" section.

Also in common with the Coursera course is the preponderance of textual matter supporting a series of recorded lectures; the course visually presents as a sea of monotonous text. Curated supplementary materials are also mostly text and the length of many of these materials can seem overwhelming to the casual learner.

PHIL102: Introduction to Critical Thinking and Logic

Sections

- Course Introduction
- Unit 1: Introduction and Meaning Analysis
- Unit 2: Argument Analysis
- Unit 3: Basic Sentential Logic
- Unit 4: Venn Diagrams
- Unit 5: Fallacies**
- Unit 6: Scientific Reasoning
- Unit 7: Strategic Reasoning and Creativity

Study Guide

Course Feedback Survey

Certificate Final Exam

Saylor Direct Credit

Resources

Activities

My programs

Completing this unit should take you approximately 3 hours.

Upon successful completion of this unit, you will be able to:

- explain fallacies of inconsistency, irrelevance, insufficiency, and inappropriate presumption;
- identify common fallacies, including the straw man, gambler's fallacy, begging the question, red herring, ad hominem, appeal to ignorance, appeal to people, complex question, loaded question, and non-sequitur; and
- describe the nature of a cognitive bias and identify examples of cognitive bias.

### 5.1: Introduction to Fallacies

What is a Fallacy?

Completed

Read this tutorial, which introduces the notion of fallacious reasoning. Fallacies are arguments that are frequently accepted as valid but which contain subtle errors of reasoning. It is important to know how to catch fallacies.

### 5.2: Types of Fallacies

Formal versus Informal Fallacies

Mark as completed

Read section 4.1 (p. 185-186) to learn the difference between formal and informal fallacies and learn two key formal fallacies that look like good logic, but are not: denying the antecedent, and affirming the consequent.

There is a popular joke among philosophers about Descartes (the French philosopher who famously wrote "I think, therefore I am") walking into a bar and, when the bartender asks if he'd like a drink, replying "I think not" and vanishing in a puff. While delightful to share among your philosopher friends, this joke actually falls prey to one of these fallacies – see if you can tell why.

List of Fallacies

Mark as completed

Read this tutorial, which defines the most common fallacies. This list narrows down some of the fallacies seen in the previous reading and is enough to get us started. We will look at a wider sample of fallacies later on in this course. For now, focus on being

## 2.2. Competitor feature comparison table

	Evaluating the Effectiveness of Arguments (Texas Education Agency)	Think Again: How to Avoid Fallacies (Duke University via Coursera)	PHIL 102: Introduction to Critical Thinking and Logic (Saylor Academy)	Critical Thinking Cap (Capstone project)
<b>Commercial aspects</b>				
Course offered for free or minimal cost	✓	✓	✓	✓
Core lesson videos and documents available for download		✓	✓	✓ May depend on source of video or document
<b>Website design</b>				
Innovative or inviting design that supports and reflects content				✓
Responsive design for desktop, tablet, and mobile		✓		✓
<b>User interface, user experience, and technical considerations</b>				
Clear, intuitive UI and course/site navigation	n/a	✓	✓	✓
Opportunities for online discussion		✓		✓ Depends on feasibility of available plug-ins
<b>Instructional design</b>				
Textual content well organized and clearly and concisely written	✓	n/a	n/a	✓
Course content richly curated with high-quality multimedia content			✓	✓
Gamification or other incentives for progress such as visual progress tracking		✓		✓
Interactive and engaging quizzes and activities	✓			✓

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## 3. Technology Requirements / Resources / Material

### 3.1. WordPress

[WordPress](#) is a free but robust content management system that allows users to create websites without having to know any web-related technologies such as HTML or CSS (though knowing these technologies is quite helpful). WordPress offers plenty of out-of-the-box functionality, but websites can be further enhanced and customized through the deployment of a wide assortment of themes and plug-ins.

**Related courses or professional experience.** Most of my experience with WordPress stems from blogs I worked on over the course of 15 years or so. As well, I built my design-portfolio site in WordPress. My most recent and complex foray into WordPress was for my final project for EDUC E-113 (Instructional Design Studio), for which I built a functional food-related training website and deployed a recipe-creator plug-in and a professional theme.

**Technologies used by competitors, alternative technologies.** According to the site surveyor [w3techs.com](#), The Texas Education Agency's site was built with Drupal (another CMS), the Coursera site with WordPress, and the Saylor Academy site with Moodle, a popular learning management system (LMS). Alternative technologies include freestanding LMSes (such as Moodle and Canvas) or other website builders for e-learning providers; such builders include [Thinkific](#) and [Teachable](#).

**Reason for selecting this technology.** Using WordPress with an LMS plug-in and a page-building plug-in will allow me more flexibility in building a site with a customized design than I could get using, say, a pricier e-learning website builder or freestanding LMS.

**How this technology will be used in the project.** I will be using WordPress and several plug-ins to build CriticalThinkingCap.com.

### 3.2. HTML

[HTML](#) is the core "semantic level" markup language used to create web pages on the World Wide Web. (WHATWG.org)

**Related courses or professional experience.** I worked extensively with HTML while taking DGMD E-20 and DGMD E-27 (Modern and Mobile Front-End Web Design I & II). I have also used HTML in creating or customizing some personal websites or pages, sometimes from scratch but usually while working with a CMS. I've also read several books and taken some online tutorials.

**Technologies used by competitors, alternative technologies.** Since my competitors are offering their courses via the World Wide Web, they, too, are using HTML.

**Reason for selecting this technology.** There's no other markup language for creating pages for the World Web. (And even if there were other options, I would probably have to work with whatever language WordPress was building pages with.)

**How this technology will be used in the project.** My understanding of HTML will be critical when I'm adjusting or customizing page templates either by directly tweaking the code output by WordPress or by selecting specific parts of a page to modify through the WordPress interface.

### 3.3. CSS

CSS is the language for specifying the presentation and visual style of web pages, as well as adjusting or optimizing the web page's presentation and style across different output devices. (W3C)

**Related courses or professional experience.** As with HTML, I worked extensively with CSS while taking DGMD E-20 and DGMD E-27 (Modern and Mobile Front-End Web Design I & II). I have also used CSS in creating or customizing some personal websites or pages, sometimes from scratch but usually while working with a CMS. I have also read books on CSS and have taken some online tutorials.

**Technologies used by competitors, alternative technologies.** Since my competitors are offering their courses via the World Wide Web, they, too, are using CSS.

**Reason for selecting this technology.** I want to be able to create a custom look-and-feel for this web project. I can do this directly (and arguably most easily) using CSS.

**How this technology will be used in the project.** My understanding of CSS will be critical when I'm adjusting or customizing page templates either by directly tweaking the code output by WordPress or by selecting specific parts of a page to modify through the WordPress interface.

### 3.4. LearnDash

LearnDash is a popular LMS WordPress plug-in.

**Related courses or professional experience.** I started learning LearnDash in September 2022 in preparation for the Capstone; I have not used any LMS WordPress plug-ins previously. I have used several freestanding LMSes to build courses while taking DGMD S-61 (Working with Educational Technologies) and used Canvas to build a course in DGMD E-60 (Designing Online Courses).

**Technologies used by competitors, alternative technologies.** I could find no information on any LMS used by the Texas Education Agency; I am guessing they might not use one at all, based on the structure of the course page. Coursera is probably using a LMS

custom-built for them. As I noted earlier, Saylor Academy is using Moodle. Alternative LMS WordPress plug-in abound; they include [Tutor LMS](#) and [LearnPress](#).

**Reason for selecting this technology.** After researching reviews, pricing, and features of at least six similar plug-ins, I selected LearnDash because of its lower pricing (plus a sweet one-time deal), its large and seemingly happy customer base, and its relatively good reviews. It also reportedly works well with Elementor Pro, a page-builder plug-in I may use.

**How this technology will be used in the project.** LearnDash will help me structure, maintain, and administer online courses through the WordPress site.

### **3.5. Elementor Pro (potentially, or an alternative page builder plug-in)**

[Elementor Pro](#) is a page-builder WordPress plug-in that will let me build pages with customized layouts and look-and-feel, either via a drag-and-drop interface or by allowing me to customize the site's CSS as I please. (I am also investigating GenerateBlocks Pro. Though it is not a page-builder plug-in per se, it does have some page-building utility in common with Elementor Pro, and works in tandem with the GeneratePress theme.)

**Related courses or professional experience.** I have been using page-layout programs for print for years as a professional graphic designer. Elementor Pro is like a page-layout program for websites that harnesses the power of layout-related CSS innovations, which I learned and/or used in DGMD E-20 and DGMD E-27 (Modern and Mobile Front-End Web Design I and II), and to a lesser extent in EDUC E-113 (Instructional Design Studio).

**Technologies used by competitors, alternative technologies.** I have no way of knowing what my competitors' sites used as page builders, or if they used any at all. Alternative page-builder WordPress plug-ins include [Beaver Builder](#) and [Divi](#).

**Reason for selecting this technology.** I selected Elementor Pro in part because it claims to work with LearnDash and .in part because I was convinced of its greatness after taking the course [Learning Elementor for WordPress Design](#) via LinkedIn Learning.

**How this technology will be used in the project.** Elementor Pro will help me build and customize the website's design and layout. (Which is also what GenerateBlocks Pro, if I choose to use it, would help me with.)

### **3.6. DreamHost**

[DreamHost](#) is a web-hosting provider with additional services such as domain-name registration and "one-click" installations of WordPress.

**Related courses or professional experience.** Just my own personal experience finding and registering domain names and setting up and maintaining several blogs and websites.

**Technologies used by competitors, alternative technologies.** According to the site surveyor [w3techs.com](#), The Texas Education Agency's website is hosted by [Acquia](#), and

the Coursera site by [Amazon](#). The Saylor Academy's web host is a bit more difficult to determine because of the web servers it uses.

**Reason for selecting this technology.** DreamHost is hosting a few other sites for me, including my graphic-design portfolio, so I am already familiar with DreamHost and how easy it makes setting up a WordPress-based website.

**How this technology will be used in the project.** DreamHost will be the web-hosting provider for CriticalThinkingCap.com.

### 3.7. Adobe XD

[Adobe XD](#) is a vector-based UI design and prototyping tool.

**Related courses or professional experience.** I used Figma, a competing product, to create sketches and prototypes for CSCI E-34 (User Experience Engineering).

**Technologies used by competitors, alternative technologies.** N/A

**Reason for selecting this technology.** I felt I was fighting with Figma the entire time I was using it. I am hoping my extensive experience with Adobe products will make easier to work with Adobe XD than with Figma.

**How this technology will be used in the project.** I will use Adobe XD to create webpage mockups and prototypes.

### 3.8. Articulate Storyline (potentially)

[Articulate Storyline](#) is software that helps users build interactive courses and activities.

**Related courses or professional experience.** I created a few interactive activities using Adobe Captivate, one of Storyline's competitors, in DGMD S-61 (Working with Educational Technologies).

**Technologies used by competitors, alternative technologies.** The Texas Education Agency has imported interactive activities into their site but I cannot determine their origins. The interactive activities in the Coursera and Saylor sites seem to be generated within the LMS. Adobe Captivate is an e-learning-focused program for creating interactive activities and courses; interactive activities can also be built using Adobe Animate or similar programs.

**Reason for selecting this technology.** Storyline seems to be much easier to use than Adobe Captivate, which I loathed.

**How this technology will be used in the project.** I am considering creating some interactive activities in Storyline to import into my course, depending on how feasible this turns out to be once the project is underway.

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## 4. Developer Manual / Product Design / Methods

### 4.1. Technical introduction

#### 4.1.1. Description

Critical Thinking Cap (CTC) will be an e-learning website — a single course with myriad lessons — built with WordPress and the LearnPress LMS plug-in.

The WordPress theme will probably be GeneratePress but could also be Kadence. A page-builder such as Elementor Pro or a similar type of plug-in such as GenerateBlocks might also be used, depending on feasibility, necessity, and time constraints. As well, plug-ins that will help back up the site, detect incoming spam, optimize page performance, and other basic niceties will also be used.

At a minimum, the site will have ten pages; course content will include two lessons. All e-learning functionality will be demonstrated through one or both of these lessons. The first lesson will be a sample lesson available to all site visitors; only users registered with the site can embark on the second and any subsequent lessons.

For the foreseeable future, course content will be provided free of charge, so initially no e-commerce functionality is planned or required.

#### 4.1.2. Minimum structure, content, functionality, and presentation

The “capstone” version of CTC will consist of at least 10 pages, including the homepage, basic pages such as About and Contact, and several pages for delivering the e-learning content. See the sitemap in section 4.4.

The basic functions to be offered:

- User registration and log-in
- Sample lesson available to all visitors
- Second (and subsequent) lessons available only to registered users
- Basic LearnDash-based progress tracking
- Linear lesson progression (each topic or section must be completed before the following topics or sections are available)
- Basic quiz types (i.e., multiple choice, fill-in-the-blanks, matching, short answer) and scoring
- Embedded video
- Downloadable lesson materials, when allowed by copyright owner, etc.
- Contact form

Basic presentation details:

- Well-branded look and feel, including color scheme, layout style, typography, and site-based imagery
- System of icons to help users distinguish various types of content
- LearnDash defaults for LMS-related elements and structure
- Clean and uncluttered site WITHOUT the dumbing down of content
- Responsive design appropriate for most desktop, tablet, and phone screens

#### **4.1.3. Nice-to-have content, functionality, and presentation**

The following content may be added as time and feasibility permit:

- Interactive activities created specifically for CTC, such as games built in Articulate Storyline
- Glossary of terms introduced in lessons
- Audio versions of textual content (and, similarly, transcriptions of video content)

One or more of the following functions may be added as time and feasibility permit:

- Student discussion forums
- Gamification in the form of keeping track of streaks or other ways to measure consistent student participation
- Presentation of a disclaimer that users must agree to before registering with the site
- “Where I left off” button (for registered users)

One or more of the following presentational aspects may be added as time and feasibility permit:

- CSS style sheet for webpage printouts
- Enhanced visual indicators of student progress
- Style and layout of LMS elements (such as topic lists) break out of the standard list format
- Estimated times for lessons and activities

## 4.2. Software / hardware components

The main technologies used will be:

- WordPress, for building the site and customizing content and style
- LearnDash LMS (WordPress plug-in to build and administer course components)
- GeneratePress or GeneratePress Pro (the currently selected WordPress theme)
- Elementor Pro or GenerateBlocks (optional plug-ins to help with style and presentation)
- HTML and CSS (for customizing page content, layout, and style as needed)
- DreamHost (Web hosting)
- Various additional plug-ins will be used; see section 4.5.6 for a complete list.

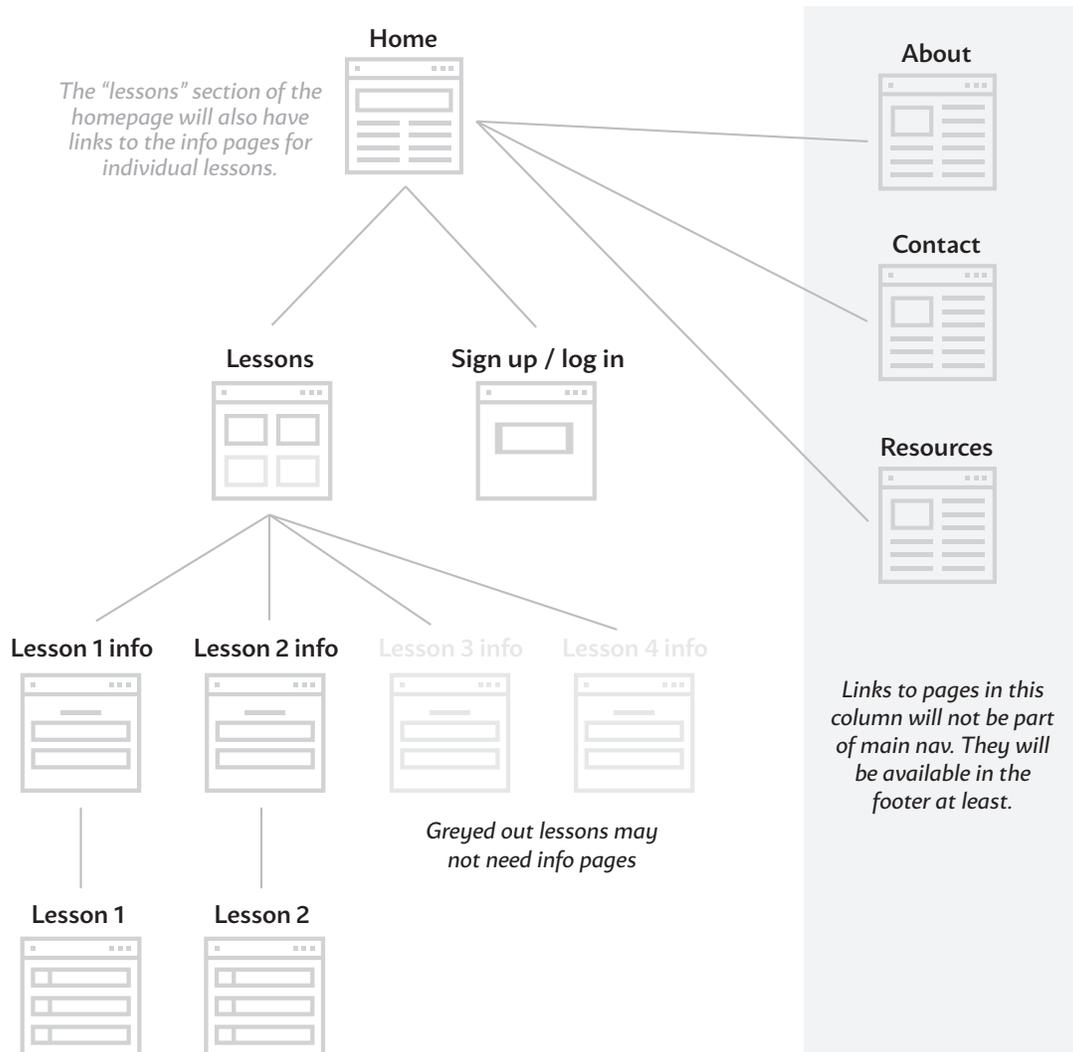
## 4.3. Materials / content

At a minimum, the website will have the following content:

- Homepage text, including promotional copy and easy registration
- Two lessons, including sections, topic pages, instructional text, multimedia/imagery, and a list of sections and topics for each lesson
- Lessons page, listing all available lessons and perhaps a few lessons “in the works”
- Sign up / Log in page (or pop up)
- About page: Brief explanation about site (including it being a work in progress), perhaps short bio and photo of Marcia
- Contact page
- Resources page with links to at least ten resources related to course content
- Site-based imagery and icons (i.e., imagery not directly related to lesson content)

## 4.4. Site map

CriticalThinkingCap.com - sitemap - d3 - October 6, 2022



## 4.5. Workflow

This workflow isn't necessary linear. Be prepared for several iterations and review periods that might require backtracking, corrections, rethinking, redoing, and tweaking in content, structure, and functionality.

### 4.5.1. Register website domain, if necessary

Criticalthinkingcap.com is already registered and the web hosting has been set up. ;)

### 4.5.2. Create at least one administrative e-mail address within domain

At the very least, this address will be used to communicate with registrants of the site. Likely it will be an administrative address, such as admin@nameofdomain.com.

### 4.5.3. Add WordPress to site

Be sure to do a clean install of WordPress, that is, do not also download sample files, templates, images, etc.

### 4.5.4. Set up WordPress basic settings

These settings include site title, timezone, permalinks, media, user registration, and default category.

### 4.5.5. Install WordPress theme

Currently testing the free version of GeneratePress. So far so good!

### 4.5.6. Install and set up WordPress plug-ins

The necessary and optional WordPress plug-ins are listed below.

NECESSARY plug-in	Function(s) and caveats
<b>LearnDash LMS</b>	Provides LMS functionality
<b>Jetpack</b>	Preferably install Jetpack before installing Akismet Anti-Spam.
<b>Akismet Anti-Spam</b>	Helps reduce the effects of spam and other shenanigans. Requires activation of an Akismet key.
<b>WP Mail SMTP</b>	Ensures all registrants/subscribers to site will receive confirmation and other administrative e-mails. Send a test e-mail to make things are set up properly.
<b>Limit Login Attempts Reloaded</b>	Controls the number of times a person can unsuccessfully log in.
<b>SVG Support</b>	WP does not allow SVGs; this plug-in overrides that default. <b>Important:</b> Select "Limit SVG uploads to administration only."
<b>Updraft Plus - Backup/Restore</b>	<i>Self-explanatory</i>
<b>WP-Optimize—Clean, Compress, Cache</b>	<i>Self-explanatory</i>
<b>WP-SuperCache</b>	Additional caching-related niceties
<b>WP-Sweep</b>	Cleans unnecessary or outdated items from database.

OPTIONAL plug-in	Function(s) and caveats
<b>LD Licensing and Management</b> <b>Uncanny Toolkit</b> <b>Autocomplete LearnDash Lessons and Topics</b>	Add additional functionality and customization to Learn-Dash-related functions and elements.
<b>Elementor Pro OR GenerateBlocks</b>	Helps build/tweak layouts, etc.
<b>Child Theme Configurator</b>	Helps create child themes
<b>bbPress</b>	Adds forums

#### **4.5.7. Add basic website structure**

Create homepage, about page, contact page, resources page. Set up menus.

#### **4.5.8. Add basic content**

Basic content includes text for homepage, about page, contact page, resources page, and headers and footers.

#### **4.5.9. Build courses, lessons, and basic quizzes with LearnDash**

Before building any course, adjust the nomenclature/terminology used by LearnDash. LearnDash course organization hierarchy defaults to courses → lessons → sections → topics. Because this site is a single course, the top level will be lessons, so the organization will skip courses and go straight to lessons → sections → topics.

Also determine other nomenclature before getting too deep into building the site. For example, would you register OR enroll OR sign up for the course (or website?), then “start” lessons?

#### **4.5.10. Adjust LearnDash settings and code as necessary**

You may have to add lesson structure and content and go back and forth tweaking settings and such.

#### **4.5.11. Populate courses, lessons, and quizzes with content**

Be sure to label or color-code any placeholder text, images, or other elements.

#### **4.5.12. Add a forum to Lesson 2, if feasible**

Lesson 1, which will be accessible to non-registered users, should not have a forum.

#### **4.5.13. Import and/or embed third-party media or activities**

These embedded elements will most likely be instructional videos or interactive activities.

#### **4.5.14. Add, adjust, and continuously check functionality**

Constant additions, revisions, deletions, and wheel spinning is expected.

#### **4.5.15. Design, produce, gather, edit, and apply design elements**

This step, which includes site icons, has already begun and will probably continue through the formal testing period (section 4.5.16).

#### **4.5.16. Test. Tweak. Repeat.**

Iterate. Iterate. Iterate.

#### **4.5.17. Final checks**

Comb through every page, take every lesson from a student's perspective, including new lesson enrollees and those continuing the lesson. Try to break stuff or find stuff that doesn't work. Then fix, adjust, etc.

#### **4.5.18. Launch**

If the site is not already live, make it so. Else submit all necessary URLs and materials before the Capstone deadline.

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## 5. User Journeys / User Manual

### 5.1. User Journeys

User journey format adapted from Nielsen Norman Group's "Customer Journey Map Template" (<https://www.nngroup.com/articles/customer-journey-mapping/>)

#### User Journey 1



#### PERSONA

Jessica

#### SCENARIO

Seeking a relaxing or immersive thought exercise

#### USER EXPECTATIONS

This needs to be quick, easy, fun, *and* educational!

Inspecting site	Inspecting sample lesson	Signing up, setting prefs	Continuing where she left off
Glancing / moving around homepage.	Clicking / moving around intro to sample lesson.	Looking for sign-up information.	Finding the spot in the lesson where she left off.
<i>"Is this a quality product? Is it worth my time?"</i>	<i>"Hm. This lesson seems long, but probably doable."</i>	<i>"Let's see how easy it is to register. . . Pretty easy. I'm in!"</i> <i>"Hm. What are all these options about?"</i>	<i>"Now, where was I??"</i> <i>"OK; it took me directly to where I was. Yay."</i>

#### INSIGHTS

**Homepage should deliver sufficient information, verbally and/or visually.** Needs easy-to-find "where I left off button" or some other way to get her quickly to her next lesson after she's been away from the course. Also: Might there be a way to set up length of time for each of her visits? Or a timer? To encourage her to visit the course regularly, even if each visit is brief?

#### User Journey 2



#### PERSONA

Margaret

#### SCENARIO

Finding out what she can learn and do, including sharing with others

#### USER EXPECTATIONS

The course should be comprehensive and well organized; being able to communicate with other students would be icing on the cake.

Inspecting site	In course, looking ahead	Sharing / discussing	Reviewing lesson
Looking around, hovering over things to see what happens, reading.	Exploring sample course: clicking around, etc.	Looking for evidence of comment sections or discussion boards.	After completing a few sections, wants to review something from an earlier session.
<i>"What would I learn on this site?"</i>	<i>"How deep does it go (step-wise)? How is it organized? How do I proceed?"</i>	<i>"I'd like to communicate with other students, or share content with friends. Can I do that?"</i>	<i>"How do I get back to the explanation of &lt;x&gt;? Is there a back button? Can I search for the topic?"</i>

#### INSIGHTS

Would a lesson- or site-wide search feature be worthwhile? How easy should it be to browse back and forth in the lesson? If access to one section depends on completing previous sections, can the user still at least peruse the upcoming topics?

## User Journey 3



### PERSONA

Brandon

### SCENARIO

Seeking a way to gain critical-thinking skills for career growth.

### USER EXPECTATIONS

Would prefer quick or well-paced instruction with breadth and depth: nothing too fluffy or too basic.

Seeking site deets	Taking lesson	Reporting error	Seeking deeper content
Perusing / reading homepage and other informational website parts	Working through sample lesson, reading, taking quizzes, moving along relatively quickly.	Finds potential lapse of logic in one explanation.	Discovers a topic that really hits home. Wants to dig deeper.
<i>"Does this course offer, say, topics &lt;X&gt; and &lt;Y&gt;?"</i>	<i>"So far, so good . . ."</i>	<i>"Hm. Not sure about that. Can I reach out to somebody? An instructor? Webmaster, perhaps?"</i>	<i>"I think this way all the time; I didn't realize it was faulty logic! How can I learn more?"</i>

### INSIGHTS

Clearly the information offered by the homepage and other standard pages (about, contact) is very important. Users enjoying the content may want to reach out to course creators and/or dig deeper into certain topics. What might be the best ways to help them make these connections?

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## 5.2. User manual

### 5.2.1. Navigating the homepage



#### *To register or log in*

- Select the **Register** button or select **Register** from the main menu.

#### *To go to a specific lesson*

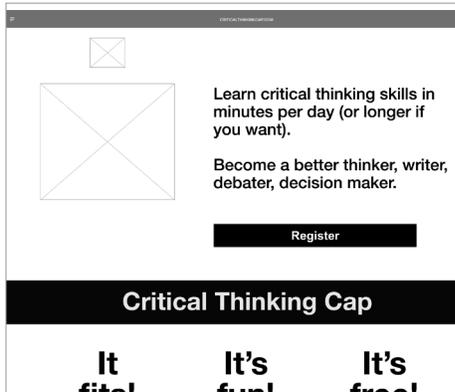
- Select the lesson from the few courses listed on the homepage, or go to the Lessons page by either clicking on the **Lessons** headline or selecting Lessons from the main menu.

#### *For additional information about the site or course*

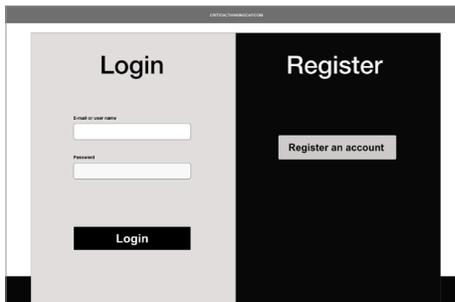
- In the footer, select **About** or **Contact**.

## 5.2.2. Registering an account

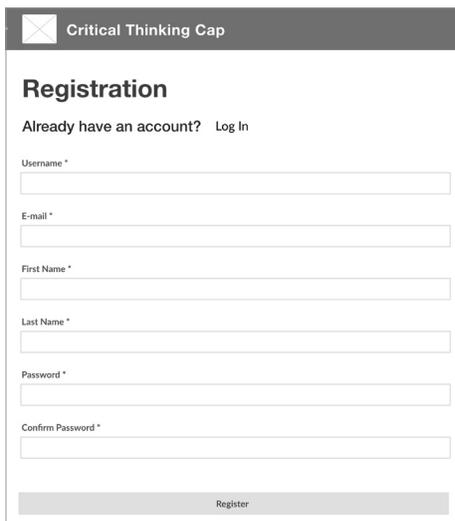
(Terminology might be changed from “registering” to “signing up,” etc, unless some terminology defaults are not easily changed, in which case “logging in” might have to be used. )



1. On the homepage, select the **Register** button (or select **Register** from the main menu).

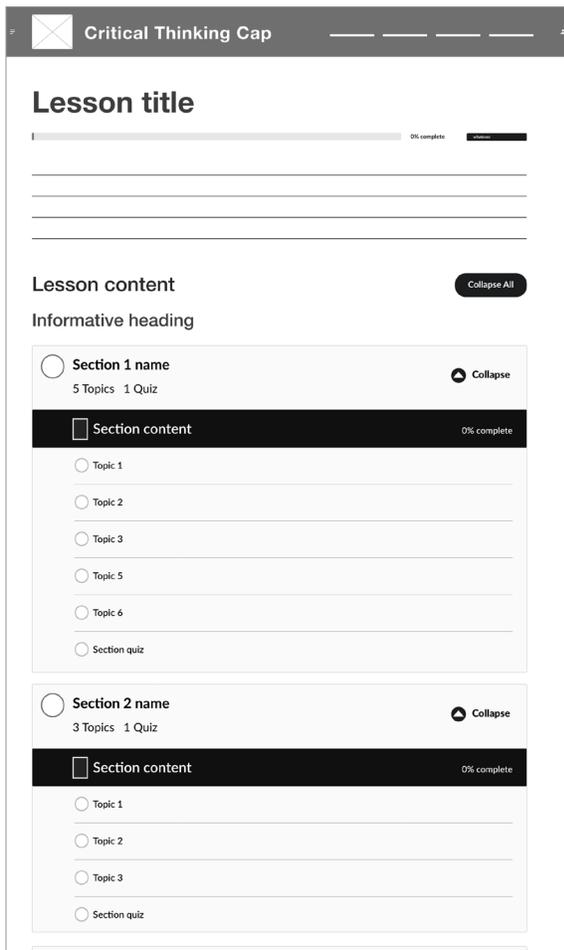
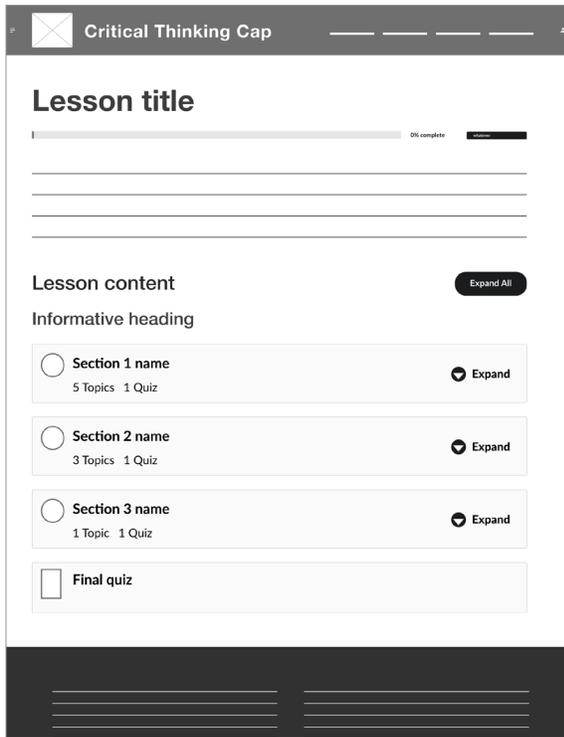


2. When the login screen appears, select the **Register an account** button.

A screenshot of the registration form. At the top left is a logo consisting of a square with an 'X' inside, followed by the text 'Critical Thinking Cap'. Below the logo is the heading 'Registration'. Underneath the heading is the text 'Already have an account? Log In'. The form contains several input fields: 'Username \*', 'E-mail \*', 'First Name \*', 'Last Name \*', 'Password \*', and 'Confirm Password \*'. At the bottom of the form is a gray button labeled 'Register'.

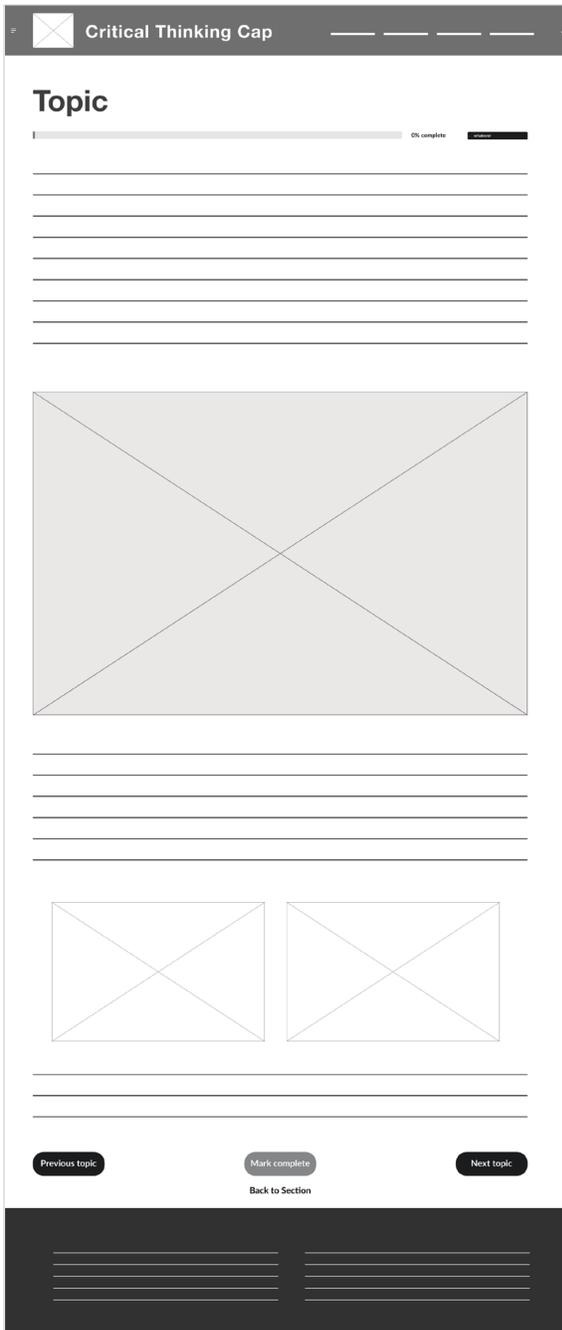
3. On the Registration page, enter the required information then select the **Register** button.
4. Check your e-mail. A confirmation e-mail with a link to set your password will be sent to the e-mail address you specified.
5. Complete your registration.

### 5.2.3. Starting or continuing a lesson



1. The lesson content page gives a brief description of the lesson, lists the sections, and provides your enrollment status and/or progress in the lesson and within each section and topic.
2. If not already enrolled in this lesson, select the **Enroll** button to begin the lesson. (You have to be registered and signed in to the site.)
3. If only the sections are listed, to see the topics within each section, select the **Expand All** button, or the **Expand** button to the right of the section name.
4. To go to a specific topic, click on the topic name.

*Note: Critical Thinking Cap lessons are linear, that is, you have to finish one topic or section to be able to progress to the next topic or section (though you can go back to previously finished sections or topics at any time). Though you will be able to see the names of upcoming sections and topics on the lesson page, you will not be able to select them if any previous sections or topics are not complete.*



5. Enjoy reading about the topic and doing the topic's activities!

To navigate between topics or go back to the Lesson page, use the buttons at the bottom of the Topic page.

To continue to the next topic you may have to select the **Mark complete** button, also found at the bottom of the Topic page.

## 6. Work Plan and Milestones

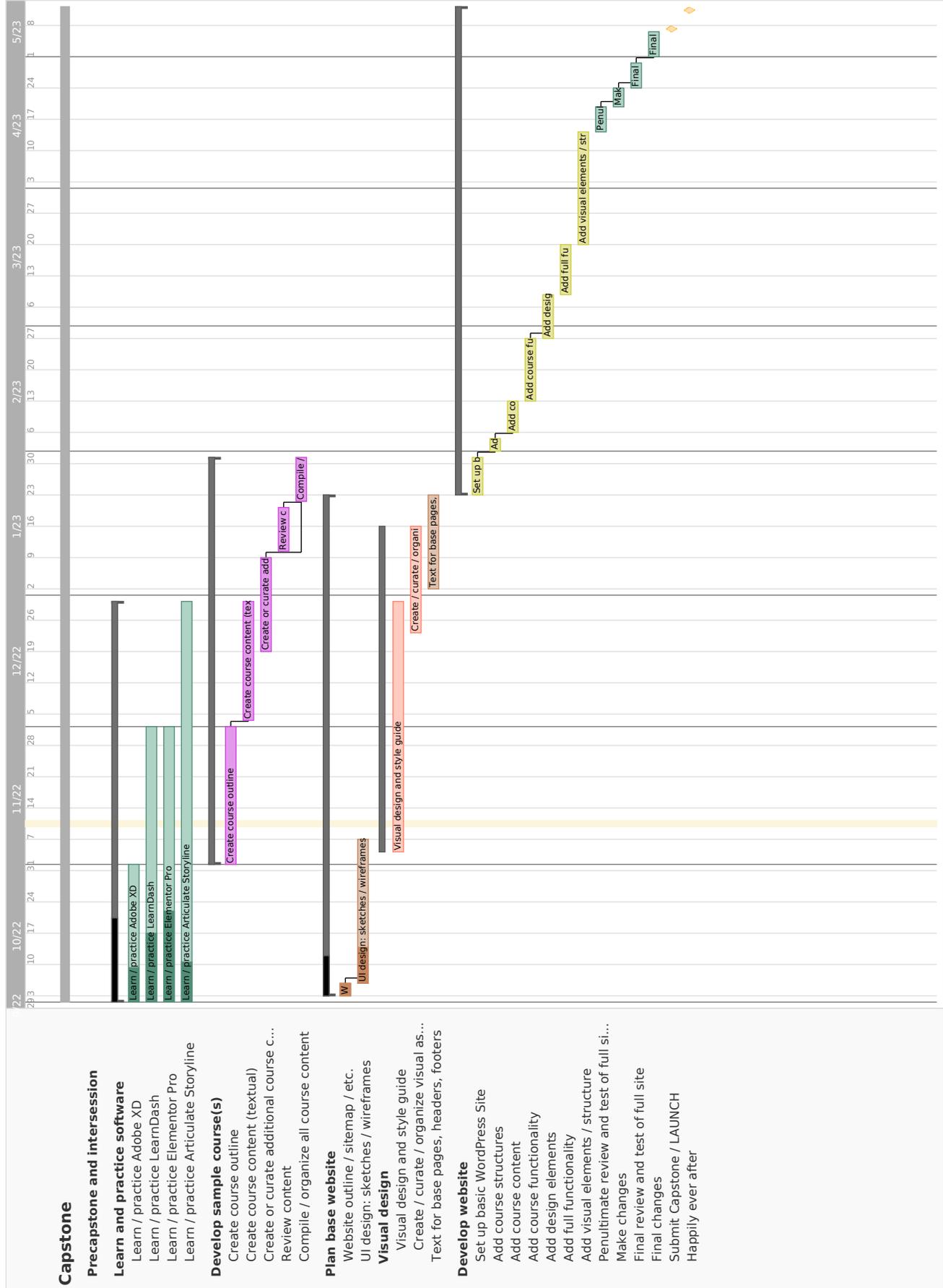
### 6.1. Deliverables

Deliverable	Details	Date due
<b>A - Sample course(s)</b>		
A1 - Course outline		11/30/2022
A2 - Course content (textual)		12/23/2022
A3 - Course content (other media)		01/06/2023
<b>B - Base website</b>		
B1 - Website outline / structure		09/29/2022
B2 - UI design	Mockups and prototypes for one or more typical user journeys	11/04/2022
B3 - Visual design and style guide	Fully designed webpage images plus guide specifying colors, typography, and other visual and multimedia considerations.	12/28/2022
B4 - Visual assets	Icons, backgrounds, fonts, etc. to be used in the site are created and/or collected and ready for website.	01/13/2023
B5 - Text for base pages, headers, and footers	Verbiage for homepage, about page, contact page, etc.	01/20/2023
B6 - Basic website set up	Website set up in WordPress with all necessary plug-ins installed with their proper settings. Basic pages (such as homepage and about page) are included with the latest text.	01/30/2023
<b>C - E-learning website</b>		
C1 - Basic course structure	Basic course structure created and populated with textual content.	02/08/2023
C2 - Functional (but unformatted) course		02/24/2023
C3 - Functional formatted course	Course structure and content has all the required formatting, visual elements, and imported or embedded items.	03/24/2023
C4 - Complete functioning website ready for review and testing		04/14/2023
C5 - Complete functioning website ready for launch		05/04/2023

## 6.2. Milestones

Milestone (completion and/or submission of item)	Related deliverables	Date due
<p><b>Creative brief.</b> Key sections of the website are outlined and explained; required and “nice to have” functions are listed and described. Includes wireframes and perhaps a flow diagram. (Much of this information can be found in Section 4.1 of this proposal.)</p>	B1, B2	11/08/2022
<p><b>Proposal</b></p>	B1, B2	11/30/2022
<p><b>Sample lesson content.</b> Create or curate lesson content sufficient for demonstrating all the site sections, functions and elements listed in the creative brief and/or capstone proposal. (Content should form a complete, meaningful, interactive lesson.)</p>	A1, A2, A3	01/06/2023
<p><b>Collection of visual design, UX, and media assets.</b> Visual design, iconography, and UX considerations and elements are researched and mockups created to demonstrate one or two visual “directions.”</p>	A3, B3, B4	01/13/2023
<p><b>Basic website set up and built.</b> WordPress and all necessary plugins are installed, set-up, and tested. Basic site content added.</p>	B5, B6	02/13/2023
<p><b>Website with full course content and functionality</b></p>	C3	03/24/2023
<p><b>Website launches.</b> Website with final design, function, and content (including sample lesson) ready for presentation, evaluation, and . . . use!</p>	C5	05/06/2023

### 6.3. Gantt chart



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## 7. References

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