# The Problem Definition

UX design students need a tutorial on design thinking which covers all five (5) stages and associated tools and techniques, concisely in clear, simple language. The tutorial should allow them to access more detail if they wish and should be free without requiring signing up for an account.

# The User

## User Stories

Graham: As a 1st year design student, I want to quickly find instructions on how to write good user stories and create user personas, in a way that is applicable to my course.

Sue: As a student I want a tutorial on design thinking that is free and requires no signup or subscriptions.

Jay: As a developer, I want to be able to understand UX jargon in as little time as possible.

Dawn: As a student-designer, I want a concise, step by step guide to developing wireframes, user stories and ideas, so that I can complete my assignments well.

Mark: As a student I want to learn about design thinking without having to do a lot of research

## User Persona

## A screen shot of a person's profile Description automatically generated

## The User Journey Map

This journey map is a map of the experience students currently face when trying to find tutorials or guidelines on Design Thinking.

A diagram of a website

Description automatically generated with medium confidence

Competition

### Market Research

Existing competitors

* Require signup or offer courses which the user must pay for
* Courses which are free (blogs, videos or sites often provide less content
* Some do offer high- quality content but volume is high and user will have to navigate through a lot before getting to what they need

#### Target Market

Anyone interested in learning about UX design or doing UX design for a project, particularly:

* UX design students
* Novice UX designers
* Developers with little experience in UX design
* UX designers looking for a different perspective

#### Competitors

According to a Moz survey of people searching using Google, 75% of them click on the first one or two results on the first results page and only 7% bother to go past that first results page.

When conducting research on competitors, search phrases included:

* design thinking process for beginners
* design thinking blog tutorial
* design thinking blog tutorial

The following table compares some of the results

|  |  |  |
| --- | --- | --- |
| Website | Pros | Cons |
| [Design Thinking Blog - IDEO U Articles](https://www.ideou.com/blogs/inspiration/tagged/design-thinking) |  | Contained links to different articles about design, including design thinking, user would need to go through list of articles to determine which were relevant |
| [What is Design Thinking? The Ultimate Beginners Guide (workshopper.com)](https://www.workshopper.com/post/guide-to-design-thinking) | Great content, very descriptive | Apart from a few videos, scattered throughout, all text-based without images |
| [The Design Thinking Process: 5 Steps Complete Guide (careerfoundry.com)](https://careerfoundry.com/en/blog/ux-design/design-thinking-process/) | Great content, very descriptive | Text-based, no images or examples based on scenarios |

Other competitors

|  |  |
| --- | --- |
| [HECMontrealX: UX Design | edX](https://www.edx.org/learn/ux-design/hec-montreal-ux-design?index=product&queryID=9c27b0e67059cda7d457e0b17af0166c&position=1&results_level=first-level-results&term=ux+design&objectID=course-cefc890d-8fba-4b33-8e51-421806c7ad47&campaign=UX+Design&source=edX&product_category=course&placement_url=https%3A%2F%2Fwww.edx.org%2Fsearch) | |
| Self-paced  Well established program by recognised institute  Accredited program option | Long duration  Large volume of material some of which may be inapplicable to user  Considerable time investment |

|  |  |
| --- | --- |
| [Digital Skills: User Experience - Online Course - FutureLearn](https://www.futurelearn.com/courses/digital-skills-user-experience) | |
| Low time investment  Free | Less material  Lots of videos, which may not work for all learners |

|  |  |
| --- | --- |
| [Google UX Design Professional Certificate | Coursera](https://www.coursera.org/google-certificates/ux-design-certificate?utm_source=google&utm_medium=institutions&utm_campaign=sou--bing__med--organic-search__cam--gwgsite__con--null__ter--null) | |
| Well established program by recognised institute  Accredited program option  Free 7 day trial | Large volume of material some of which may be inapplicable to user  Considerable time investment  Pay for time taken, so speed determines cost |
| [A complete guide to the design thinking process | Mural](https://www.mural.co/blog/design-thinking)  A screenshot of a white page  Description automatically generated  *Figure 1 Screenshot from Mural: Ideate Stage* | |
| Good written content about the design thinking process  Links to application of design thinking in large projects with some images | No reference to use of user stories, affinity diagrams, POV or how to generate them  Not really a case study approach that a student can follow  Ideate stage lacks description of techniques that students can use |
| [The UX Cookbook](https://theuxcookbook.com/) | |
| Great content when each card is opened  Clear language | A novice ux designer may not which of the cards applies to the stage of design thinking without looking at the card, quite time-consuming  No direct reference to stages of design thinking  Largely text based content, photographs provided, very few actual diagrams |

|  |  |
| --- | --- |
| [UX Tutorial 1: What Exactly Is UX Design? (Free Course) (careerfoundry.com)](https://careerfoundry.com/en/tutorials/ux-design-for-beginners/what-is-ux-design/)  A close-up of a person's face  Description automatically generated  *Figure 2: Screenshots from Career Foundry UX tutorial*  A screenshot of a web page  Description automatically generated | |
| Has career suggestions, skillset required, as well as detailed explanations linked to main page  Construction of some UX diagrams are described in detail | To learn more, user has to go to separate page  In some instances, there is a lot of text where a diagram or example would be more helpful, too much detail for user to sort through |

# Alternative Solutions

* YouTube Videos – narrated video split into chapters for each design thinking stage or a series of videos, each of which covers a different stage. The video will walk the user through the stage, the techniques used and how to develop the associated graphics and tools.
* Pros – videos appeal to some learning styles
* Cons - even though videos can be organised into chapters, it may be difficult to pinpoint where in the chapter required information is located.
* Interactive PDF – Similar to the online handbook, it will outline each stage at a higher level and provide links to more detailed descriptions, lists of techniques which also link to more detailed guides on how to apply the techniques.

Pros - Can be used when student does not have Internet access, at work or on the bus, relatively small file

Cons - Requires some knowledge of software such as InDesign or Adobe Acrobat, Development languages, HTML, CSS, JavaScript are available within the Visual Studio environment for free, both e-book and interactive PDF require access to different software.

* E-book, published via Kindle – Can be created like a regular book that provides information on each stage in separate chapters
* Pros – It can be free to benefit students or sold at a small price to ff set development costs
* Cons – the user will need to have an Amazon Kindle account, this restricts its market somewhat

The online handbook is the best solution because:

* Online handbook requires no account setup like a Kindle e-book would.
* Online handbook displays content as text and images, can be used anywhere unlike YouTube video which has audio and may not play well in some areas due to network security restrictions or bandwidth
* Online handbook allows user to quickly jump to relevant parts,

# The Solution

Create content for a free online handbook for students which uses clear and simple language to describe the Design Thinking Process.

Present the handbook as a responsive, easily navigable, accessible website with clean and minimalist design, built using HTML (content), CSS(style), JavaScript(logic).

## Technical Solution

[nic-dgl409-wi24/dgl-409-capstone-project-Jan-elle-Chan at mvp (github.com)](https://github.com/nic-dgl409-wi24/dgl-409-capstone-project-Jan-elle-Chan/tree/mvp)

The MVP was built using BootStrap 5.3.2 which allows for the rapid development of a responsive website which the user can navigate to using any browser at no cost and without sign-up.

Features that demonstrate idea

* Clear and simple language
* Clean and minimalist design since there will be diagrams etc
* Responsiveness
* List/ show the five (5) stages of the design thinking process: Empathize, Define, Ideate, Prototype, Test
* For one of the five (5) design thinking stages provide
  + Concise one-line description of what the stage accomplishes

*Example: In the* ***Empathize*** *stage you try to understand the user and their needs.*

* + Brief description explaining the role in the overall process, activities undertaken, techniques used and any deliverables produced.

*Example: During the empathize stage you try to get to know the user and the problem/s they are facing. This will involve observation, immersion, interviews, surveys…*

* + List techniques used
  + Provide an example of a technique/ stage deliverable from successfully completed school project.

## SWOT ANALYSIS

Strengths

* Simple, conveys minimal information with opportunity for further exploration
* Free and no sign-up
* Covers material in a trending field of study
* Developer is using a known tech stack
* User focused

Weaknesses

* Limited income stream
* Not developed by an expert in Design Thinking or UX Design

Opportunities

* Explore potential sponsorships with software companies that sell software for development of graphics, or possibly educational organisations
* Expand content based on user feedback, build client loyalty as they feel involved in development of platform

Threats

* Other online resources

# Biography

At NIC I had ample opportunity to create and solve problems through active learning and projects. Throughout all my courses at NIC I had to work through projects of varying sizes, some with set specifications which the entire class had to replicate, some where we were allowed variations and others where we had a high degree of leeway. This project-based approach provided me with practical experience in delivering projects that closely mirror those in the real world of work. The completion of each project required me to problem-solve and create, as well as refine my web-development skills.

During my two years of study at NIC I have become proficient in several languages, environments and tools. For most projects I have used GitHub for version control and Visual Studio Code as my development environment. For web development I have learnt and have become proficient in HTML and CSS. I have also become competent in JavaScript, SCSS and BootStrap, as well as WordPress. For graphic design, wireframes, mock-ups, publications and other graphic elements I have used and become proficient in Adobe Suite (particularly Illustrator, InDesign and XD) and Canva. All of the above make me quite capable of completing this project successfully.

# Work Plan

Project Plan

Create content for a free online handbook for students which uses clear and simple language to describe the Design Thinking Process.

Present the handbook as a responsive, easily navigable, accessible website with clean and minimalist design, built using HTML (content), CSS(style), JavaScript(logic).

Write a case study detailing the development of the project.

|  |  |  |
| --- | --- | --- |
| **Stage** | **Time** | **Activities and deliverables** |
| Prototype | Feb 6th to Feb 13th | Use low-fidelity and eventually high fidelity wireframes or prototypes |
| Create MVP Description | Feb 6th | Write complete MVP description, including but not restricted to wireframes, feature prioritization |
| Testing | Feb 6th – Mar 4th | Ongoing, spanning several weeks and states of completion, including but not restricted to usability testing and accessibility testing |
| Research, curate and edit content | Feb 6th – Mar 4th | Ongoing until final site delivery |
| Develop MVP | Feb 4th to Mar 4th | Use HTML, CSS and JavaScript to build site |
| Implement | Mar 4th | Produce final website, based on feedback from testing and critique |
| Present final site | Mar 4th – Mar 11th | Present final site, critiques |
| Write Case Study | Mar 18th – Mar 25th | Write case study, present complete project, critiques |
| Revise Project | Apr 1st | Streamline code, refactor, debug |

UX Research Plan

For this project the following UX research activities will be undertaken, some of them have already been completed.

Completed Activities (See below)

* Survey
* Brainstorming
* Affinity Diagram
* User stories
* Low fidelity wireframes

Activities to be completed

* Low fidelity wireframes (another iteration)
* High fidelity wireframes
* Prototype Feedback and testing
* Usability Testing
* Accessibility Evaluation