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June 4th, 2022

## Project 1

### Process

Coming up with an idea to start with was fairly difficult, however I ended up settling on creating a website focused towards learning, and game development. Since tools in this industry rapidly develop, I wanted to create a website that can present current information on the various engines and tools available. I also have a lot of experience trying to learn and scavenge information about these topics, often finding that the information on the topic is segmented. Often you only find enough information on one specific tool or game engine, excluding others that are available for developers.

After choosing my topic, I needed to find a good Wikipedia page to use as my source of information and text. Looking at the page on Game Engines, it did not give me that specific information that I wanted to build my website around. Instead, I decided it would be better to select a specific game engine's wiki entry. This would allow me to have the information I need for at least one tool, while still fulfilling the purpose of the website. For this, I chose the Wikipedia article on the Unreal Engine ([https://en.wikipedia.org/wiki/Unreal\\_Engine](https://en.wikipedia.org/wiki/Unreal_Engine)).

### Major Website

Initially, I wanted something simpler in a wiki-format to base my website around. After going through some options however, I decided against it. When it comes to an artistic field like creating games and interactive media, a more eye-catching website is preferred. It has to be something that is more than a wall of text and plain navigation buttons, at least for the landing page. To achieve this then, I chose the Unreal Engine webpage (<https://www.unrealengine.com/en-US/>) as my major website.

The various elements on the website is dynamic in a sense that it is more than walls of information. It has interesting images at the top, with information presented in cards that link to other sections. The website also has darker primary colors, which I wanted to keep. Since my website is geared towards developers who often work with dark-themed tools, presenting a dark-themed website supports my intended audience.

The following are screenshots of the chosen major website, which served as a basis for this project.

## Main Landing Page:

The world's most open and advanced real-time 3D creation tool

[LEARN MORE ABOUT UES](#)

**Create without limits**

With Unreal Engine, you can bring amazing real-time experiences to life using the world's most advanced real-time 3D creation tool.

From first projects to the most demanding challenges, our free and accessible resources and inspirational community empower everyone to realize their ambitions.

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**Learn Unreal Engine**

With hundreds of hours of free online learning content, an extensive library of webinars, and options for instructor-led training, we have a way to learn that's right for you.

[START LEARNING](#)

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**Join the community**

Unreal creators are the true power behind Unreal Engine. Be part of a community that builds cutting-edge experiences, and supports each other along the way.

[VISIT COMMUNITY](#)

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**Get support**

Explore comprehensive reference documentation, instructional guides, community-based support, and options for dedicated professional support.

[SEE SUPPORT OPTIONS](#)

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The latest from Unreal Engine

[SEE ALL NEWS & EVENTS](#)

## Website Inner-Page:

The screenshot shows the 'Learn' section of the Unreal Engine website. At the top, there's a navigation bar with links for 'PRODUCTS', 'SOLUTIONS', 'NEWS & EVENTS', 'LEARN' (which is underlined), 'COMMUNITY', 'SUPPORT', and 'MARKETPLACE'. To the right of the navigation are search, user profile, and download links. The main header features a large image of a lighthouse at sunset over a snowy landscape, with the text 'GET AHEAD' and 'Learn Unreal Engine'. Below this, a sub-header reads: 'Unreal Engine is the fastest-growing skill requirement in real-time and 3D graphics. Learn the skills you need to succeed in game development, architecture, film and TV, automotive, and more.' There are three main navigation links: '01 LEARN ONLINE', '02 INSTRUCTOR-LED TRAINING', and '03 FOR STUDENTS & EDUCATORS'. The '01 LEARN ONLINE' link is expanded, showing a sub-section titled 'Master the real-time skills and techniques used in your industry'. It includes a paragraph about curated courses for specific industries, followed by a horizontal menu with 'GAMES', 'FILM & TV', 'ARCHITECTURE', and 'VISUALIZATION'. Below this is a smaller image of a mountainous landscape, and to its right is a call-to-action button: 'Get started with games'.

## Website Footer:

The footer is a dark blue section with various links and social media icons. At the top, there are icons for Twitter, Facebook, YouTube, Instagram, and RSS feed. Below these are four columns of links: 'GAME DEVELOPERS' (Epic Online Services, Epic Games Store, Releasing your game, Guides & white papers, Unreal Indies), 'SUPPORT' (Get help, FAQs, Documentation, Issues, Forums, Roadmap, Ask a question, Unreal Developer Network), 'PARTNERSHIPS' (Nvidia Edge, Intel + Unreal, Academic partners, Training partners), and 'COMPANY' (Awards, Branding guidelines). At the bottom, there's a copyright notice: '© 2004-2022, Epic Games, Inc. All rights reserved. Unreal and its logo are Epic's trademarks or registered trademarks in the US and elsewhere.'

## Personas

For the user personas that the website will be modeled towards, I had two types of users in mind. I wanted the website to be built for hobbyists, who just want to be kept in the loop about new tools. Often times, to find more information about something users have to either be well connected with the industry already, or stumble on article releases. This website would contain information on more than one company's released tools, allowing users to discover information they otherwise would not have.

The other user persona I wanted to target are those who are already aware of the industry, but just want a brief look at the new tools that are available. Having everything in one place allows them to track developments across companies and products, and lets them easily choose the next tool to shift towards. For this project and website, the tools are the various game engines themselves, and the unique features each one provides.

### Jane Hobey



**Job Title**  
Lead Developer

**Age**  
25 to 30 years

**Highest Level of Education**  
Master's degree (e.g. MA, MS,

**Industry**  
Technology

#### Biggest Challenges

- Smaller tools are difficult to find
- Have to dig through specific sites for each tool for information
- Major tools and developments are scattered around

#### Relevance To Topic

Uses Game Development as a hobby  
Curious about the major tools in the field

#### Goals or Objectives

- Discover new or different Game Engines and tools
- Learn more about the industry
- Connect with other individuals in the field

### James Designer



**Job Title**  
Lead Developer

**Age**  
35 to 44 years

**Highest Level of Education**  
Master's degree (e.g. MA, MS,

**Industry**  
Technology

**Organization Size**  
51-200 employees

#### Tools They Need to Do Their Job

Game Engines  
Programming IDEs

#### Biggest Challenges

- Finding Resources On New Tools
- Scattered Information On Game Development Topics
- Hard to find current topics/tools in the industry in one place

#### Goals or Objectives

- Find the new tools in the world of game development
- Finding easy comparison points for Game Development tools to use moving forwards
- Maintaining a competitive atmosphere with other game development companies

## Information Architecture

The information architecture for the original Wikipedia page is fairly linear. The entirety of the content is displayed vertically, meaning users have to scroll down to each section to view it. While there is a content navigation bar near the top of the page to help resolve that issue, I found that spreading out the information would be more beneficial.

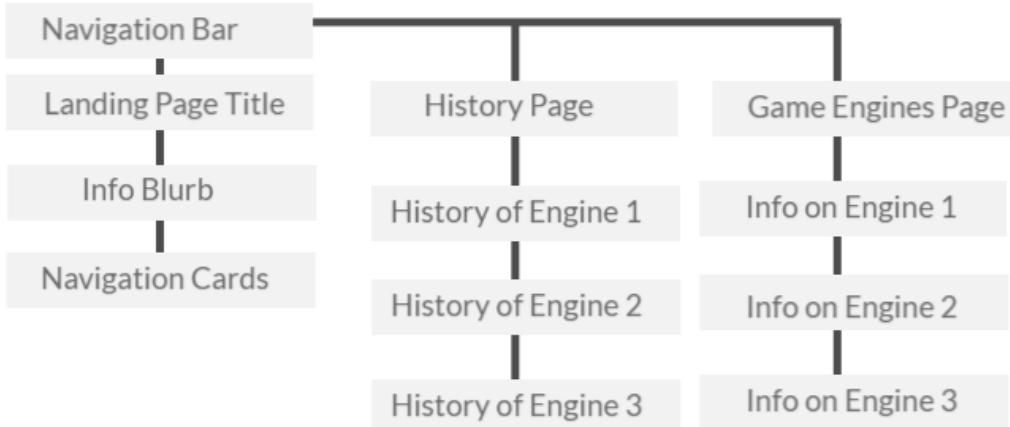
To best optimize the page so that it may be viewed by my intended audience, I wanted to split the content up between other pages. Since some users are only focused on the tools, I created a “Game Engines” page with all the relevant information on game engines posted there. To help focus down on the essential parts, the only information posted there would be about the recent developments on that specific game engine. Additionally, another page is created for the persona that is simply curious about interesting details regarding game engines. This would be the “History” page, where they can read up on the factors that led to the development of specific game engines.

### Original Wikipedia Page

Title & Intro
History
Scripting
Marketplace
Usage
Awards
Legal Aspects
See Also, References, & Further Reading

Below you can see the revised information architecture for the new page.

### Revised Page



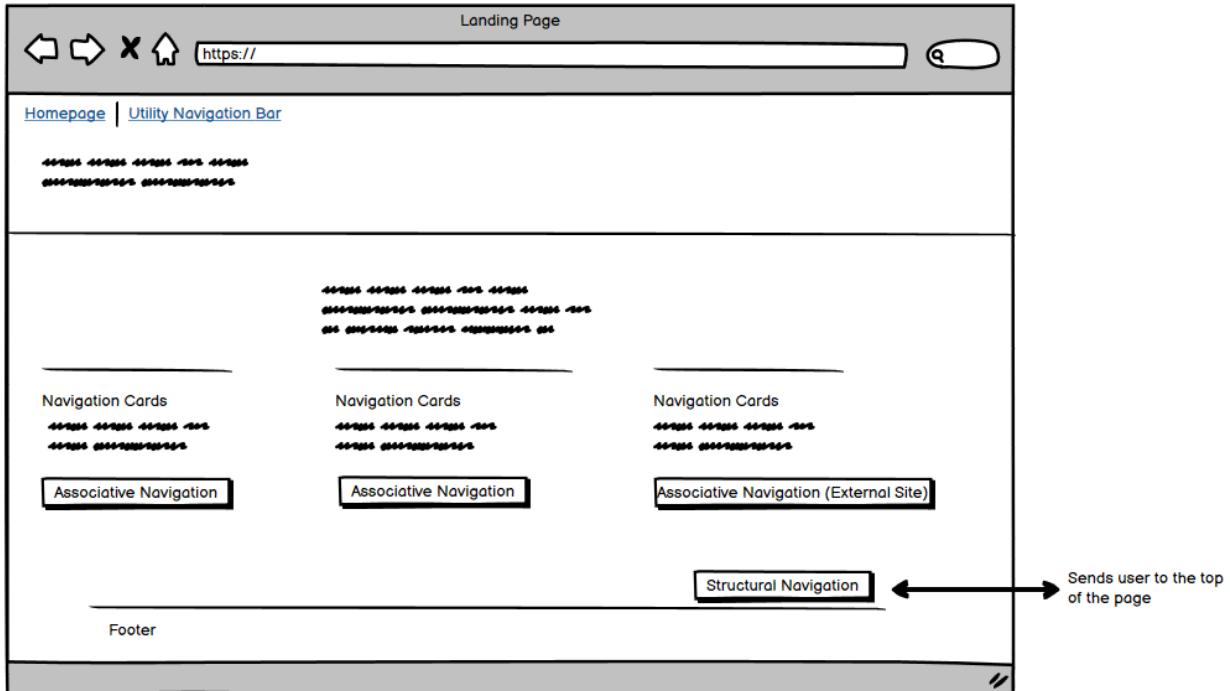
Here, relevant information for each persona is spread out so it can be directly accessed. Additionally, adding information to each section is simple, meaning more content can be easily added. Note that the navigation cards at the bottom of the landing page are tailored to the user personas, allowing them to travel to the other inner pages of the website.

## Wireframes

For the design of the landing page, I wanted the hooks for my defined personas to be immediately visible. The cards at the bottom of the page fulfill this role, by directly targeting those personas and providing links to their relevant needs.

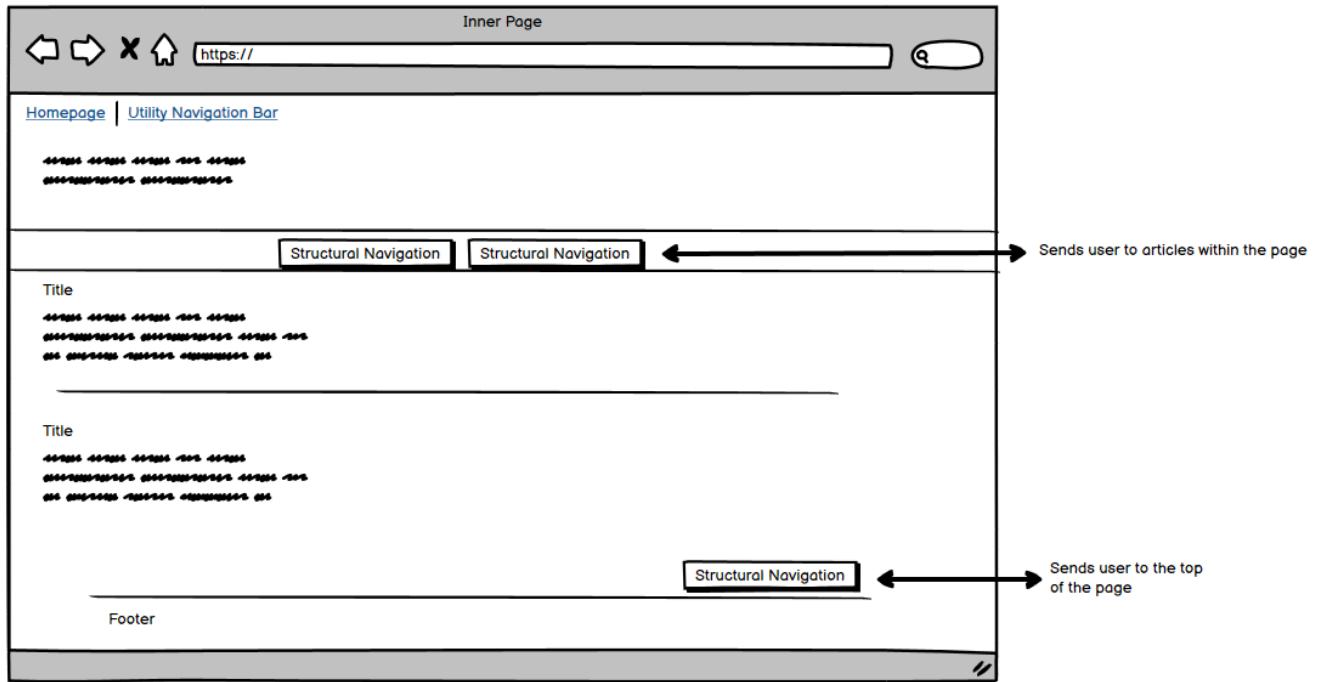
Apart from this, the page is designed to be minimal, keeping clutter down so that it appears more inviting. The centered text and vast empty space with images serve to help this.

This is all reflected in the wireframe for the landing page below.



For the design of the inner pages, the information provided is particularly dense. To help users get the information they are specifically looking for, a structural navigation bar is provided. This also helps signal to the users the exact contents of the current page they are on.

The wireframe for this page is also provided below.



## Accessibility

Addressing accessibility concerns is essential to ensure all users may have equal access to the contents of the website. For this webpage, accessibility was especially a concern due to some text being layered over images. To help reduce this problem, a vignette effect was added to each image, making the text stand out more from the background.

The colors chosen for the webpage also ensure a high contrast for users with different color blindness issues. Originally, the colors I had chosen for the website were slightly brighter than that of the major website I used as a reference. However, after comparing the color contrast within the page I decided to use the color scheme present in the major website itself. This was because the major website I chose had higher contrast between the background and the text, allowing for better accessibility.

Additionally, alt tags are added to images that are not produced directly through the stylesheets themselves, including some aria labels at specific sections of the webpage.

Despite these efforts, some issues are still present within the page. Particularly, some of the text present within the website may be too thin to be clearly read by some users. This text was changed to be thinner for aesthetic reasons, and so degrades the accessibility of the website for some users.

## References

Certain website content was retrieved from the Wikipedia article on the Unreal Engine, (retrieved from [https://en.wikipedia.org/wiki/Unreal\\_Engine](https://en.wikipedia.org/wiki/Unreal_Engine)). This content was placed in the History and Game Engines pages within the website.

All images were used from unsplash.com.

In particular:

The header image for the landing page is by Markus Spiske and was retrieved from [https://unsplash.com/photos/hvSr\\_CVecVI](https://unsplash.com/photos/hvSr_CVecVI)

Images within the landing page apart from the header are by Vishnu Mohanan (retrieved from <https://unsplash.com/photos/pfR18JNEMv8>), Aaron Burden (retrieved from [https://unsplash.com/photos/QJDzYT\\_K8Xg](https://unsplash.com/photos/QJDzYT_K8Xg)), and Papaioannou Kostas (retrieved from <https://unsplash.com/photos/tysecUm5HJA>) in the order they appear on the webpage from left to right.

The header image for the History page is by Natalia Yakovleva and was retrieved from <https://unsplash.com/photos/f5xddISq428>

The header image for the Game Engines and Credits page is by Markus Spiske and was retrieved from <https://unsplash.com/photos/3dw6ie9x3Q0>