GNG 2101 C - Intro. to Product Development

Deliverable D - Prototype I, Project Progress Presentation

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Prototype I: Development

Prototype Characteristics

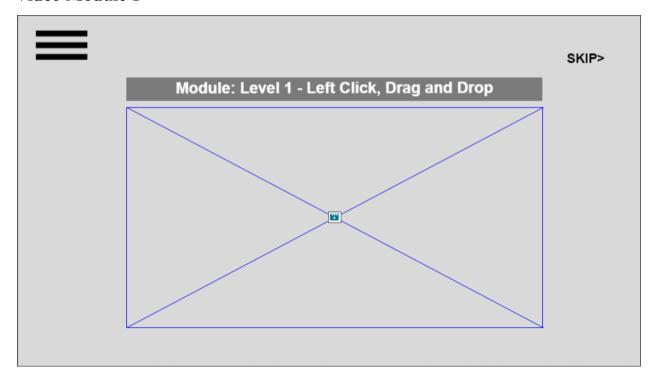
Use	Communication: especially to communicate the user's experience while using the app. Its goal is to answer some of the following questions: Is it simple and easy to understand? Are the core functions and features applied in an understandable and logical manner?
Туре	Physical/ Focused : main game feature, feasibility and logic
Fidelity	Low medium

Module

The module is divided into two big sections: video instruction and exercises. The video instructions include videos that introduce and teach the mouse actions corresponding to the game levels that the user is going to play right after. After the user finishes consulting the videos, the application will provide small, different exercises to practice the "just learned" mouse actions before going to the game. On the top left corner, there is a menu symbol that whenever the user clicks it, it takes the user to the menu UI as shown in Project Deliverable C. After choosing to get back to the module, the user is taken back to the module/exercise that the user was processing.

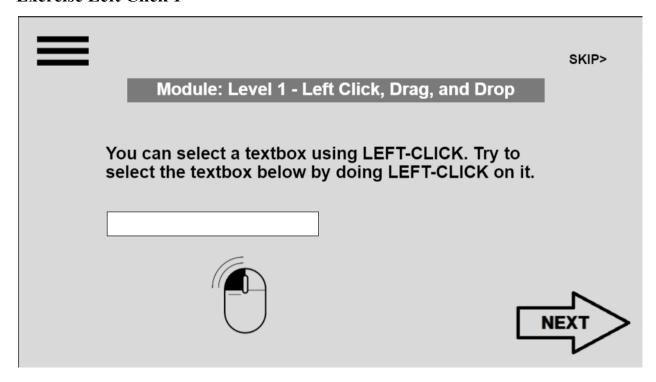
https://hi3u.itch.io/jerry

Video Module 1



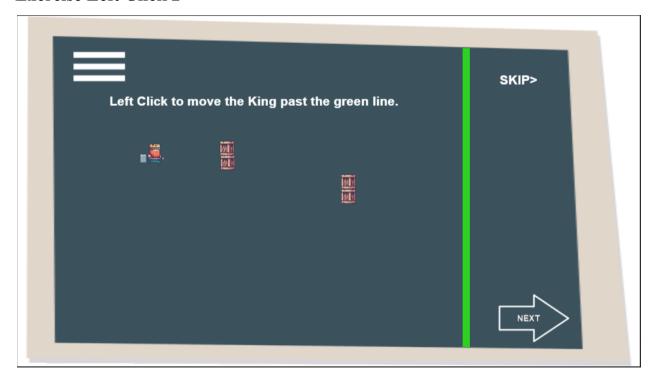
This video will guide the user through the first basic mouse actions - Left Click, Drag and Drop, which are also necessary for the upcoming game level. The video is not made interactive since the user at this point does not know how to use a mouse. If the user already knows how to use a mouse and just comes for practice, there is a "SKIP>" button that when clicked, the application moves on to the next section - the exercises.

Exercise Left Click 1



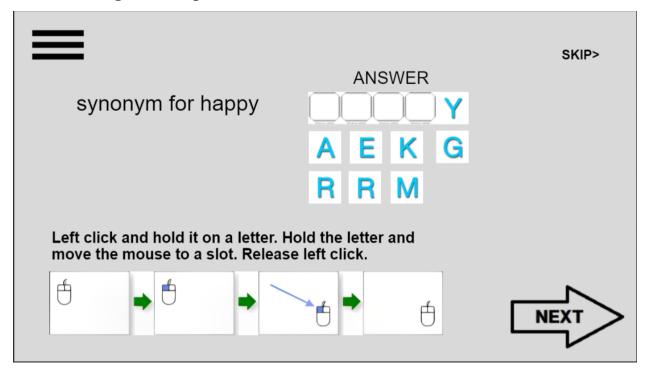
The first exercise asks the user to use left click to select a text box. There is a visual left click to show more vividly how to perform a left click. There is also a "SKIP>" button that skips this exercise and moves on to another one. The "NEXT" button will not be visible at the beginning. It only appears after the user successfully selects the text box, and the button moves the user to the next exercise.

Exercise Left Click 2



The second exercise asks the user to use the left click to move the "King" character past the green line. There is also a "SKIP>" button that skips this exercise and moves on to another one. The "NEXT" button will not be visible at the beginning. It only appears after the user successfully moves the character past the green line, and the button moves the user to the next exercise.

Exercise Drag and Drop

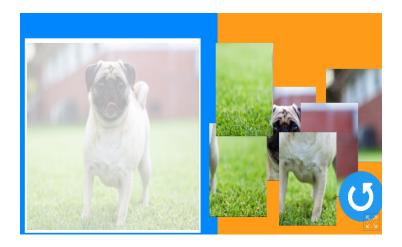


The third level asks the user to use the drag and drop mouse action to drag and drop the letters in the slots. This comes as a puzzle game for entertaining value to decrease the tenseness if any for the user. There is also a "SKIP>" button that skips this exercise and moves on to the next section. The "NEXT" button will not be visible at the beginning. It only appears after the user successfully completes the exercise, and the button moves the user to the next section.

Game

The game was divided into two parts and both parts were implemented using the software construct 3. The first part which is the puzzle part was implemented in a way that will help the user build the puzzle while still being engaged. The difficulty of the puzzle is also adapted to the different levels. More mouse functions were added as the game progresses as not to overwhelm the users and to help them practice different mouse skills gradually and build on the ones learnt from previous levels. The second part is the word part. This part was implemented not only to help the user learn mouse skills but also as a cognitively stimulating activity. It is also a way to keep them more engaged by doing something else other than just building a puzzle.

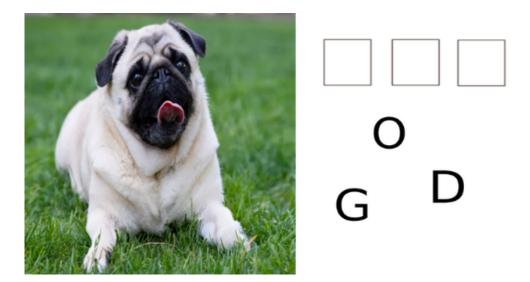
Puzzle



Link to Construct 3: https://hi3u.itch.io/prototype-level-1-dog

The puzzle game is made of 4 different levels. For the first prototype, we decided to implement the first level only, as we want to test how the game feels like to other people in terms of simplicity and based on the feedback, we will adjust the difficulty accordingly. For this prototype, the game is a 6 piece puzzle. The different pieces are given to the user together with a frame containing a faint picture of how the puzzle is supposed to look like. The goal is to guide them when building the puzzle and make it easier to understand. The user has to left click each piece and drag it to the right position on the puzzle. Once the piece is dropped on the right position, the user won't be able to move it anymore. The user has to repeat the same process until the puzzle is done. Once the puzzle is done, the user can move on to the second part of the game or redo the puzzle again.

Word



Link to Construct 3: https://hi3u.itch.io/nada-dog-word-component

For the first word component prototype, the task was to create a proper functioning UI that demonstrates the overall concept of the word dragging phase of the game. The different letters will be given to the user separately and the user has to left click and drag them to the right frame. Similarly to the puzzle part, once a letter is placed in the right location, it can't be moved anymore. This property was added in case some users had a difficulty figuring out the word. It is important to mention that the main objective of the app is to help users learn mouse skills not test their cognitive skills which is why this property was added to the concept. Once the word is finished, the user can move on to the next level.

Prototype I : Testing

Your target specifications can evolve from PD B. Present your testing in an organized, tabular format that shows expected versus actual values.

For the first five objectives, the survey asked the users to use a scale ranging from 1 to 5. 1 is for the worst experience related to the specific objective and 5 is the best experience.

Test #	Objective	Test Method Description	Test method	Expected Result	Actual result
1	Usability and feasibility UX	Ask 8 people about user experience and how easy the app is to use	<u>Customer</u> <u>survey</u>	5	1 (very hard) $2 \to 25\%$ $3 \to 12.5 \%$ $4 \to 37.5 \%$ 5 (super easy) $\to 25\%$
2	Has a visual demonstration of instructions			yes	$Yes \rightarrow 62.5 \%$ $No \rightarrow 37.5 \%$
3	Age Appropriate			5	1(very childish) → 37.5 % 2 (→ 37.5 % 3 → 12.5 % 4→ 12.5 %
5	Teach fundamental mouse skills (left click, right click, dragging)			100%	Yes → 62.5% No(dragging + left click) → 37.5%

6	Module - Minimal lagging and logical errors	Each Module is testing for edge case, logical error and lagging. All function	Team runthroug h	Some logical errors to be detected and debugged YES	For the exercise, any mouse-clicking motion is accepted and seen as successful despite being a left-click exercise Characters can get lost in the far right and far left of the screen. The letters can go behind each other in-game and hide each other in the click+drag exercice YES
7	Puzzle- Minimal lagging and logical errors				Overlapping pieces in puzzle can be stacked on top of each other and be hidden YES
8	Word - Minimal lagging and logical errors				The snapping feature prevents the user from making an error; Automatically snapping even if you are not very close to the letterbox. The letters have the ability to behind the picture and be hidden YES

User Comments:

- Instruction and exercices are hard to understand
- Tend to focus on understanding what being asked instead of practing mouse skills
- Pictures get hidden behind the object
- Word game word automatically goes to the right position when you move
- Slow response time for king exercice, doesnt really go where you wanna go
- Video doesnt work
- Some module were working and needed to be reloaded

Conclusion

This question was answered using Chat.open.ai, and was modified accordingly. The prompt was the following: what information should you get from a second prototype presentation with a client?

During a second prototype presentation with a client, it is important to gather information about their thoughts and feedback on the current design and functionality of the product. Some key information to gather include:

- 1. Usability and user experience: Does the product meet the client's needs and expectations? How does it feel to use the product, and what can be improved? What are the areas most liked and disliked?
- 2. Design and aesthetics: Does the design meet the client's aesthetic standards? What changes, if any, would the client like to see in the design? Do the color contrast enough for the end user? Are the fonts readable?
- 3. Functionality and features: Does the product have all the necessary features and functions the client needs? What additional features or improvements would the client like to see?
- 4. Technical issues and limitations: Are there any technical challenges or limitations that need to be addressed? What are the client's concerns about the technology and its reliability?
- 5. Is it accessible to users with disabilities and does it meet the client accessibility standards?
- 6. Navigation and user flow: Is the navigation and user flow intuitive and easy to use? What changes, if any, would the client like to see in the navigation or user flow?

7. User onboarding: Is the user onboarding process clear and easy to follow? What changes, if any, would the client like to see in the onboarding process

By gathering this information, you can ensure that the final product meets the client's expectations and requirements, and that any necessary changes or improvements are made before the final release

Project Plan

Wrike Snapshot Link:

 $\frac{https://www.wrike.com/frontend/ganttchart/index.html?snapshotId=dL1NwxFkGNKuSYqn3w2JRxYyBvM59zwQ%7CIE2DSNZVHA2DELSTGIYA}{}$