Biography:

Joseph Lee

I was born in the large suburban area of Woodbridge, Ontario, which is just a few kilometres north of Toronto. I was raised in a Korean household along with two older brothers who study law and commerce, and both of them have gone to work overseas in different parts of Asia.

I attended St. Michael's College School, a Catholic high school in downtown Toronto, where I would spend most of his six years doing extracurricular activities and volunteering. After graduating, I went to pursue an undergraduate degree in Computer Science at the University of Toronto, where I am currently a 3rd year student. In the future I hope to start up my own company and hopefully enjoy what I do (in the computer science field).

In my spare time, I enjoy reading, playing sports, and travelling, if time permits it. But above all, I enjoy spending time with friends and family.

MVP:

A core component in "The Stack" is the easy, comprehensive, and educational way to learn programming. By using The Stack, the user will come across a way to learn the basics of coding (sentence structure, how functions work...) without going through the tedious effort of reading books to understand it. The concept of this project is that there will be blocks of code that, when stacked properly in the right order, will run and do a task. The task that it does will vary depending on the question given by the program. By stacking the proper blocks of codes, the user will learn the syntax of the desired language, and understand the key words in that language and what everything does. In addition to this, there is also a progress bar so the user can see how far they have come from not knowing anything to where they would be.

No other project right now is as simple, yet effective as this. Many other products may need you to write code, but for those who have no idea can begin to visually see it laid out in front of them, and then move it around so they can learn. This idea does not stop at just code, it can and will expand to bigger ideas in computer science, such as data structures or sorting algorithms.

John is a user who has tested out The Stack, was ecstatic to find a website where he did not have to go to multiple sites to learn one concept. He was eager to learn Python and he experienced The Stack, he found out that it was not hard to learn through the program. Simply put, John quotes, “No other website satiates my need for a fun and educational computer science application.”

CRC Cards:

Our back end is mostly HTML based, and so we do not really have “classes” for the CRC cards, rather we have per web page which responsibilities are what all the button functions on the page does, and collaborators are where the page would lead to.

|  |  |
| --- | --- |
| **Game** | |
| **Responsibilities** | **Collaborators** |
| Levels  Game board  Progress  Problem  Logout | Level page  Profile  Home  Ranking |

|  |  |
| --- | --- |
| **Home (Intro)** | |
| **Responsibilities** | **Collaborators** |
| Login function  Register  About us  Start game  Logout | Level page  Profile  Q&A  Ranking |

|  |  |
| --- | --- |
| **Login** | |
| **Responsibilities** | **Collaborators** |
| Username  Password | Home  Q&A  Register |

|  |  |
| --- | --- |
| **Q&A** | |
| **Responsibilities** | **Collaborators** |
| Logout  Show basic Q&A | Home  Profile  Level page |

|  |  |
| --- | --- |
| **Level Page** | |
| **Responsibilities** | **Collaborators** |
| Show levels  Select levels  Logout | Game  Home  Profile  Q&A  Ranking |

|  |  |
| --- | --- |
| **Register** | |
| **Responsibilities** | **Collaborators** |
| User info: Username, password, email, name of user | Home  Login  Q&A |

|  |  |
| --- | --- |
| **Profile** | |
| **Responsibilities** | **Collaborators** |
| User info  Progress  Ranking  Logout | Home  Q&A  Ranking  Level page |

|  |  |
| --- | --- |
| **Ranking** | |
| **Responsibilities** | **Collaborators** |
| Show ranking of the level | Home  Profile  Q&A  Level page |

User Story via CRC: (The bold is where they would go to)

1. John Miller decides to search for a better website to practice computer science. John eventually finds The Stack. John decides to start a new beginner exercise in Python that he finds on The Stack.

John would stumble onto the home page, then heads to the registration page to create and account and then start the game

|  |  |
| --- | --- |
| **Home (Intro)** | |
| **Responsibilities** | **Collaborators** |
| Login function  **Register (to create account to play game)**  About us  Start game  Logout | Level page  Profile  Q&A  Ranking |

|  |  |
| --- | --- |
| **Register** | |
| **Responsibilities** | **Collaborators** |
| User info: Username, password, email, name of user | **Home (head to the home to play the game after accounts made)**  Login  Q&A |

|  |  |
| --- | --- |
| **Home (Intro)** | |
| **Responsibilities** | **Collaborators** |
| Login function  Register  About us  **Start game (play the game)**  Logout | Level page  Profile  Q&A  Ranking |

1. John decides to learn more about algorithms and proofs and finds an exercise to re-stack a proof that is written and mixed up.

John would head to the home page (assuming he is still logged in and on a different site) and then head to the game page, then to the levels page to change to algorithms and proofs

|  |  |
| --- | --- |
| **Home (Intro)** | |
| **Responsibilities** | **Collaborators** |
| Login function  Register  About us  **Start game (start the game)**  Logout | Level page  Profile  Q&A  Ranking |

|  |  |
| --- | --- |
| **Level Page** | |
| **Responsibilities** | **Collaborators** |
| **Show levels (show levels drops a table)**  **Select levels (choose algorithms and proofs)**  Logout | Game  Home  Profile  Q&A  Ranking |

|  |  |
| --- | --- |
| **Game** | |
| **Responsibilities** | **Collaborators** |
| Levels  **Game board**  Progress  Problem  Logout | Level page  Profile  Home  Ranking |

1. John has to create a for loop that keeps track of the sum of 100 randomly generated integers and write it to a text file. All the code is provided for John but the lines are in a mixed up order. John carefully deciphers the code and does not need to find external resources to solve the problem.

John would click start game (presumably on the home page) and head to the levels, change to “for loops” section and look at the problem of the game

|  |  |
| --- | --- |
| **Home (Intro)** | |
| **Responsibilities** | **Collaborators** |
| Login function  Register  About us  **Start game (start the game)**  Logout | Level page  Profile  Q&A  Ranking |

|  |  |
| --- | --- |
| **Level Page** | |
| **Responsibilities** | **Collaborators** |
| **Show levels (show levels drops a table)**  **Select levels (choose for loops)**  Logout | Game  Home  Profile  Q&A  Ranking |

|  |  |
| --- | --- |
| **Game** | |
| **Responsibilities** | **Collaborators** |
| Levels  **Game board**  Progress  **Problem**  Logout | Level page  Profile  Home  Ranking |