**REQUIREMENTS**

**Students (User)**

Students are the main target of our application and they are the users who will be using the system more than anyone else. They will be able to access the system and navigate to their course of choice with minimum difficulty, gain information about the course and take that course if they want to. They will also form our key user story.

**Key user story:** As a student, I want to be able to see the pre-requisites and the post-requisites of my chosen course so that I can make an informed decision on what course I want to do.

Flow Steps:

* 1. Search for course
  2. Choose your course from the list. It takes you to the course node
  3. Scroll down to see the pre-requisites. Scroll up to see the post-requisites.
  4. Click on a course
  5. Choose course based on the information box that appears after selecting the node

Alternative Flow:

* 1. Navigate through the map to search for your course
  2. Find and zoom in to the course node interested in
  3. Scroll down to see the pre-requisites. Scroll up to see the post-requisites
  4. Click on a course
  5. Choose course based on the information box that appears after selecting the node

Exceptional Flow:

* 1. Search for course
  2. No such course available
  3. A list of similar courses appears
  4. User closes the application

Atomic Requirements:

* 1. Search for course – A search bar for input. A search system to search through the database and return results.
  2. Choose your course from the list. It takes you to the course node – Select a course from the list. A system to display the required section of the map
  3. Scroll down to see the pre-requisites. Scroll up to see the post-requisites – A system for the user to interact with the map so that the user can access all the courses
  4. Click on a course – The user selects a node from the available options and the program displays a box containing relevant details about the course
  5. Choose course based on the information box that appears after selecting the node – Course page (containing the course materials) linked to the node opens after the user double clicks on the node.

**User Story:** As a student, I want to be able to access courses similar to my topic of interest so that I can do another course that might interest me after I am done with my course.

Flow Steps:

* 1. Search for course
  2. Choose your course from the list. It takes you to the course node
  3. Choose a course
  4. Click on the faded branches to see similar courses
  5. Click on a course node from the newly highlighted nodes
  6. Choose course based on the information box that appears after selecting the node

Alternative Flow:

* 1. Navigate through the map to search for your course
  2. Find and zoom in to the course node interested in
  3. Click on a course
  4. Click on the faded branches to see similar courses
  5. Click on a course node from the newly highlighted nodes
  6. Choose based on the information box that appears after selecting the node

Exceptional Flow:

* 1. Search for course
  2. Choose your course from the list
  3. Zoom in to see all the nodes connected
  4. Choose a course node
  5. No faded branches available for the course
  6. User closes the application

**User Story:** As a student, I want to be able to see only those courses that are connected to my topic of interest, from the beginners to the advanced level so that I have information about all the courses concerning my topic.

Flow Steps:

* 1. Search for course
  2. Choose your course from the list. It takes you to the course node
  3. Click on the desired color line to highlight the path

Alternative Flow:

* 1. Navigate through the map to search for your course
  2. Find and zoom in to the course node interested in
  3. Click on a course
  4. Click on the desired color line to highlight the path

Exceptional Flow:

* 1. Search for course
  2. Choose your course from the list. It takes you to the course node
  3. No path available because it is an isolated node.
  4. User closes the application

**SuSy Research Ltd (System)**

SuSy Research Ltd is an independent research and social enterprise working with projects related to sustainability. Their focus is to build sustainable systems. It is the owner and the system manager for our application and have complete control over it. They are the ones who have the largest impact on our system along with the development team. Our main point of contact throughout the project is Mauro Fazion Filho.

**Education Platforms (System)**

Online education platforms are of great significance especially in these uncertain times of the pandemic. They will be able to use our application and display their courses in a more elaborate and easier to find way. They will have a huge impact on the system in this way. Through our application they will be able to provide their courses in a more feasible and accessible manner.

**Development Team (System)**

As the system developers we have the biggest impact on the system as it is our responsibility to develop and test the system so that it fulfils all the demands of our client and must ensure we provide a working and sustainable solution to this problem. Our team comprises of Karolina Kadzielawa, Baiquan Zhang, Joel Bearn, Kashmi Garg and Piyush Bajaj.