Note: “Tech Tree” mentioned in this project is implemented using graphs, so in the context of this project, the keywords, “Tech Tree” and “Graph”, are interchangeable, so are “node/nodes” and “vertex/vertices”.

**Specification Summary:**

The application “Tech Tree” is a study app with online communities for people with similar learning interests to share study notes and resources. This app could serve as a “guide” for users when they are learning as a beginner in a specific field.

**CRC Summary:**

We are only listing the classes that are used to make the skeleton program possible.

**Entities**:

User, PublishedContent, Post,

DirectedGraph, Vertex, Community

**Use Cases**:

GraphManager, Usermanager

**Interface adapters:**

Main

**Frame works & drivers:**

UI: Command Line UI

**Scenario Walkthrough Summary:**

After creating an account, users begin by selecting the Tech Tree, “CS Introductory Series”, and the node “Introductory Python”. After studying for Python, users return to “Tech Tree” to indicate that they have finished studying. Then, users can post their study notes in order to unlock the next nodes: “Introductory Java”, “Introductory C++” and “CSC165”.

**Skeleton Program:**

what it can achieve:

* prompt users to enter a username, an email, and a password, when creating a new account.
* select the corresponding Tree and node when users enter it’s id
* produce a post with the content entered by users
* display new nodes that users unlock

**Each Member’s Responsibility During P0:**

crc model

everybody involved

splitted into 3 groups of 2 to work on separate versions

combine them into one version

construction of skeleton Program:

Alfred(Package Posts, Command Line UI)

David(Package Graph, Posts, Tests, Java)

Ashley(Package Graph, Java, Posts, Tests)

SuTong(Package Java, Command Line UI)  
 Arthur(Package Tests)

specification, progress report & scenario walk-through

Coco

Ashley

Arthur

**Plan for P1:**

Discuss the implementation of all features of our application. These features include, users’ own spaces, reward system, achievement system, and many others mentioned in our specification. We also need to refine the design of our project so that it respects Clean Architecture and SOLID principles. The final step is to decide the parts of the implementation each member is responsible for.

**Open Question:**

How to implement Java GUI as our User Interface?

**What has worked well so far:**

We collectively think that the DirectedGraph’ability to auto-unlock vertices once the previous vertex has been completed has been implemented well. We are able to achieve this by using the data structure, directed graph, to implement “Tech Tree”.