

# CS 242 Final Project Proposal

YetToDecide

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## 1. Abstract

### 1.1. Project Purpose

What is the purpose of this project? What problems do you want to solve?

The purpose of this project is to set up a mini Facebook. The problem I am to solve is to build a platform in order to connect people through the use of a graph database.

### 1.2. Background/Motivation

Why are you interested in doing this project? Have you worked on something similar before?

I want to learn more about using graph databases and also learn more about performing analytics on the data available in the website from users. I have not worked on anything like this before.

## 2. Technical Specifications

2.1. **Platform:** Web Application

2.2. **Programming Languages:** Python, HTML, CSS, Javascript, neo4j querying

2.3. **Stylistic Conventions:** snake\_case

2.4. **SDK:** Flask

2.5. **IDE:** PyCharm

2.6. **Tools/Interfaces:** Web Application, Neo4j Database

2.7. **Target Audience:** People looking for an interface to share views

## 3. Functional Specifications

### 3.1. Features

1) Log in page and create user profile

2) Being able to share links with people based on username

3) Being able to build statistics such as list of closest people, what does a person tend to share more, what are person's interests?

### 3.2. Scope of project

The result of this project is very dependent on the number of users using the website. Hence, an issue that I foresee is that with limited number of users, we will not be able to show concrete results. This would mean artificially creating data.

## 4. Timeline:

### 4.1. Week 1

- Create Login and Sign Up page.
- Create basic user page displaying information of user.
- Be able to interact with the graph database by letting users make a post.

#### **4.2. Week 2**

- Enable users to make posts to specific other users.
- Create a tab for the user that enables him/her to view the posts shared with him/her.
- Create a tab for users that enable them to view posts shared by them.
- Create a tab that enables users to see public posts.
- Start building statistics about users such as the users they share posts most with.

#### **4.3. Week 3**

- Develop statistics about the kind of posts that users make. This will be a new tab that shows them the topics of the posts made by them.
- Provide link suggestions based on user profile.
- Develop a score of how close a person is to another person and use that to generate "friend suggestions"

#### **4.4. Week 4**

- Make use of graph database to develop additional features.
- Build new statistics.
- Clean up UI and project.

### **5. Future Enhancements**

Additional features could be actually creating a friends database for each user. I hope to carry this project on and build it into a an actual usable site.