

StudyPilot - Final Report

1. Introduction

This report outlines the development process, accomplishments, and outcomes of our team project focused on creating a social platform tailored to internship programs. The goal of the project was to provide a space where users can explore other users' profiles, register companies and internship opportunities, and receive personalized recommendations based on their profile data.

2. Project Description

Our web application is built using Python and the Flask framework. It serves as a social platform where registered users can:

- View and interact with other users' profiles
- Register companies and associate internship listings with them
- Fill out a profile questionnaire upon registration
- Receive three personalized internship recommendations based on the questionnaire results, generated using a Softmax Logistic Regression model
- View their match percentage with each recommended company
- Enter and edit personal data relevant to internship applications
- Create posts on their personal profile pages

The integration of a machine learning model allows for intelligent matchmaking between users and internship programs, enhancing the user experience and the platform's value.

3. Achievements & Results

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Throughout the project, we successfully achieved the following milestones:

- Developed a user-friendly interface with Flask and integrated HTML/CSS for front-end
- Built a robust user authentication and registration system
- Implemented functionality for adding and managing companies and internships
- Integrated a dynamic user questionnaire that captures personal and professional interests
- Trained and deployed a Softmax Logistic Regression model for recommendation scoring
- Enabled profile-based post creation and display
- Ensured data validation, secure storage, and seamless user experience

The project was completed according to the proposed timeline and fully meets the defined objectives.

User feedback from test cases has been overwhelmingly positive, especially regarding the recommendation accuracy and interface usability.

4. Task Distribution

The following team members contributed to the project.

Kristian Kostadinov – Task coordination among team members, creation of Word documentation, preparation of the final PDF report, development of the questionnaire and its web page, implementation of the company registration functionality, creation of UML diagrams, and preparation of sprint logs.

Stiliyan Georgiev – GitHub repository management, contribution to Word documentation, UML diagram creation, participation in designing the questionnaire questions, preparation of Agile-based user stories, creation of the presentation, and sprint log documentation.

Teodor Tanev – Development of the login and registration system, integration of the AI model that generates three personalized internship recommendations after completing the questionnaire, development of the profile editing functionality, implementation of the other users' profile view, implementation of the post creation functionality on user profile pages, and creation of unit tests for key functionalities.

Mariela Dimova – Development of the login and registration system, design of an interactive and user-friendly interface, implementation of the student-teacher role system, development of the

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profile editing feature, implementation of the other users' profile view, implementation of the post creation functionality on user profile pages, and creation of unit tests for key functionalities.

Stiliyan Mishev – Development of admin dashboard features, GitHub management support, and enhancement of company-related functionalities.

Lyubo Dimov – Design of a custom platform logo, GitHub management, development of Agile-based user stories, creation of the README file, and preparation of the final project presentation.

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Each member played a crucial role in ensuring the success of the project.