1 Project Overview

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2 Introduction

2.1 Purpose

The purpose of the project is to develop a web application that helps connect people with projects on Github. Specifically, this application hopes to connect developers and designers with projects that could use their support. This application will also connect orphaned projects and organizations with interested parties.

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3 Background

3.1 Industry & Domain

This project targets the open source (software) community and individual contributors.

4 Potential Users and Customers

- Students A good way to gain experience in software engineering and build up a portfolio.
- **Hackathons** Connect ideas developed in hackathons with additional people to sustain development beyond event.
- Non-profit Organizations Promote low resource organizations looking for developer talent.
- Github Orphans Find new maintainers for projects/organizations that have been orphaned.

5 Main features for product

- Interested Contributors Let people who are interested in contributing sign up using Github credentials and list their skill sets.
- Projects Looking for Contributors Let projects hosted on Github register to seek contributors.
- Projects Looking for Maintainers List projects that are or will be orphaned.
- Machine Learning on Users/Projects Pull analytics from past public Github data to be compiled into a profile.
- Automated Matching Automatically rank and match projects to interested contributors based on similarity in skills.
- Ranking System Allow individuals to vote on different projects and users to impact how it is displayed on the application.
- Featured Users/Projects Feature specific users or projects weekly based on a theme.

6 Main features for project

For this course, I am looking to implement the following features:

- Interested Contributors
- Projects Looking for Contributors
- Projects Looking for Maintainers

Each category will be stored in its own database and allow searching and sorting over the set of unique features (i.e. years of experience, programming languages, development tools, domain, contact information).

7 Estimated Schedule

	October		Nov	rember	December			
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Project Proposal		<i></i>						
Research $Tools^1$								
Design Website 2								
Landing Page & Login ³								
Project Market place ${\it Template}^4$								
Project Pages $Template^5$								
Contributor Marketplace/Pages 6								
Set up $Django^7$								
Progress Report								
Set up Project Database ⁸					<i>3</i> 22			
Set up Contributor Database ⁹					311/11/11			
Thanksgiving Break						<u></u>		
Algorithm for display 10								
$\rm NLP/ML$ for statistics 11								
Email Notifications 12								
Personalize $Accounts^{13}$								
Final Video								
Final Report								
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Main Features:

Additional Features:

¹Research different APIs to be used (i.e. Github, email client)

²Generate mockup and outline flow of website

³Landing page for browsing with optional login using Github credentials

⁴Page for browsing open projects seeking maintainers or contributors

⁵Page for viewing details about open projects seeking maintainers or contributors

⁶Pages for browsing & viewing potential contributors

⁷Set up Django framework

⁸Backend database to store project information

⁹Backend database to store contributor information

 $^{^{10} \}mathrm{Determine}$ order for displaying results in market place

¹¹Pull interesting statistics about user/project from their online pages

¹²Automated email notification for project maintainer/interested contributors if matched

 $^{^{13}}$ Personalize accounts more