

CSC510 - Fall20

Project proposal

Team Formation Assistant

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Group 8

Participants :

Lokesh Reddy Police – lpolice

Sameer Thummalapally – vthumma

Sri Harsha Varma Uppalapati – suppala

Unith Mallavaram – ukmallav

Wyatt Andresen – wcandres

Introduction:

We are planning to implement an assistant which helps in forming the teams automatically based on the requirements and tools used in a new project. To segregate individual team members into some form of groups, we will use Machine Learning Clustering algorithms to form clusters and utilize these clusters to form the teams based on project requirement.

Problem Statement:

Build an assistant which will take the project requirements, team members availability, skill level, tools preferred, etc. as input and assigns the members for the new team.

Project Objectives:

- Design a form for the user to enter data
- Design a dashboard to showcase the generated team assignments
- Create and Manage a database with team members, Projects, Assignments data.
- Write an algorithm which will take the project requirements, team members availability, skill level, tools preferred, etc. as input and assigns the members for the new team.

How we plan to carry out the project:

Algorithm Implementation:

We plan to code the application in Python3. Python ML libraries will be used for Cluster identification.

Database Implementation:

We plan to store team members into an oracle database. Python files import the data and process it and store the final result back to the database.

Frontend Implementation:

Team members will be able to submit a form to consider them as part of project assignment.

Final team assignment will posted on the homepage dashboard. We plan to implement the dashboard and form using HTML, CSS, JavaScript