# **Project Bid**

# **CSCD350- Software Development Principles**

Team Name: TechTitans Dated: 04/05/2024

**Canvas Group number: Software Engineering Project Group 5** 

Name	Email id	Project Experience	Programming Language used
Shahzeb Khan	mkhan11@ewu.edu	Terminal Based Game called Heroes and Monsters built using Java	Java, SQL, C, C++, Python, JavaScript
		Premier League Soccer Season Analysis using data from kaggle and using Jupyter Notebook (Python)	
		To-Do List Website created using basic vanilla JavaScript, HTML5, and CSS3	
Rahat Bhatia	rbhatia@ewu.edu	A chatbot using OpenAl and Langchain.	Python, Java, SQL, C, C#, .Net
		Real-time bee tracking system using the YOLO V5 model	
		Hand gesture recognition vehicle employing OpenCV	
Parbhat Rai	prai@ewu.edu	java project to book a cruise trip,	python, java, C, sql
		implementation of google pagerank algorithm to rank web pages,	
		project to create 3 virtual machines and network them together where 2 vms acted as pcs and one acted as a router.	
Nathan Luiten	nluiten1@ewu.edu	Text-Based Roguelike game played in terminal using C++	C, C++, C#, Java, SQL

		Interface for creating and booking cruise trips in Java Interface that allows a user to query a database using SQL and Java	
Andrea Diaz	adiaz21@ewu.edu	Developed a standalone program in Java, incorporating SQL queries using JDBC, to interact with the books database. The project involved writing and executing SQL queries to retrieve specific information from the database.	Java, SQL, C, C++, Python
		Implemented a Java program to create a basic Cruise System (CS) that facilitates the management of cruise ships, cruise ports, and cruise rooms	

Choice of Projects (Brief 2–3-line description about the problem statement and type of project like a Mobile app/Webapp/Something else)

## **Project Choice 1(1st Preference):**

### **ChatWithPDF (PDF Reader):**

An AI based chatbot that will take a PDF as an input. The user can then chat with the PDF using the chatbot in any desired language. We will also incorporate Text-to-Speech and Speech-to-Text to cater people with disabilities to use the application. We plan to create both a mobile application and a web application. This project will use Python language and frameworks like Langchain and OpenAI. We will use Node.Js and React.Js for website development. We can also use Vue and Veutify for the same

# **Project Choice 2(2<sup>nd</sup> Preference):**

### **Plan Your Trip:**

This is a web-based application where one can plan their upcoming vacation trip. The person can use the website to add the location they are going to, what things they need to bring with

them, and what activities or places they want to visit once they are there. We can further improve on this by maybe adding an AI API that would also give places to visit or things to do in the particular city. We can use basic JavaScript, HTML, and CSS on the frontend. We can either use Python frameworks such as Flask to build the backend or we can use Node.JS for the backend for easier integration with the frontend.

## **Project Choice 3(3rd Preference):**

#### **2D Turn Based game:**

A 2D game made using Unity that has the player go through multiple randomized rooms with possible enemy encounters and supplies they can pick up. combat could work like something similar to older Pokemon games where the player can choose to attack, heal, or run from the encounter. The goal would be to make through a set amount of rooms. It would have an inventory interface as well for checking how many healing items and what not the player finds in the rooms.

### **Additional Remarks/Inputs**

Please tell us about any other factors that we should take into consideration (e.g., if you really would like to work on a project for some particularly convincing reason).