

Project Title:

Connect Four Game with Chat Feature

Team:

- Peter Yang
- Adam Aouaj

Project Objective:

- The goal of this project is to develop a Connect Four game with a real-time chat feature using socket and python. The game allows two players to communicate during the game.

Scope:**Inclusions:**

- Development of a Connect Four game with standard rules (6x7 grid, two-player gameplay).
- Chat feature using Python sockets that allows real-time communication between players.
- Graphical user interface for the game and chat.
- Reset and restart the game without restarting the application.

Exclusions:

- AI opponent
- Single-player mode

Deliverables:

- Python scripts for server and client (connect_four_server.py and connect_four_client.py)
- README.md file with setup, usage instructions, and game rules.
- Presentation of functionality of the game and chat feature.

Timeline:**Key Milestones:**

- Project Setup and Initial Research (Date:09/23)
- Basic Game Functionality (Date: 09/26)
- Socket for Chat Feature (Date: 09/30)
- User Interface (Date: 10/04)
- Testing & Debugging (Date:10/8)
- Final Presentation (Date: 10/20)

Task Breakdown:

- Project Setup: 5 hours
- Game Logic and Victory Conditions: 12 hours
- Implementing Socket: 15 hours
- In-Game Chat Feature: 8 hours
- User Interface Design: 10 hours
- Testing and Debugging: 15 hours
- Final Presentation: 5 hours

Technical Requirements:**Hardware:**

- Two computers (one for the server and one for the client)
- Network for socket communication.

Software:

- Python 3.0
- Socket library
- Operating System

Assumptions:

- Both players will play via a local network
- Python 3.0 installed for basic system requirements
- Players can play the game while chat to the opponent

Roles and Responsibilities:

- **Project Manager:** Peter Yang
 - Responsible for keeping track of the project progress.
- **Developers:** Peter Yang & Adam Aouaj
 - Responsible for game logic, socket programming , and GUI development.
- **Tester:** Peter Yang & Adam Aouaj
 - Responsible for testing and ensuring game functionality and stability.
- **Documentation Lead:** Adam Aouaj
 - Responsible for writing and maintaining project documentation.

Communication Plan:

- Weekly Meetings: Team will meet at least once a week to keep track of the progress
- Project Updates: Daily report on what has been done and what needs to be done