

Project 1 for Web Application Development by JAVA (Individual)

Congratulations on reaching the first project of the course! Over the next three days, you will be working on your first project that will allow you to further apply your knowledge and skills to build another real-world application. This project will serve as a demonstration of your proficiency in building a CLI application, focusing on JAVA basics.

Project Description

Create a console tic tac toe game that relies on a random number generator to control the computer turn. Each student will work solo and submit their own project. Below you will find expectations and minimum requirements.

Be creative, and have fun!

Rules & Guidelines

- **Java Basics:** Each student should use all java basics concept: Variables, Scanner, Conditions, Loops, Arrays, Methods.
- **Individual Work:** Each student is expected to work individually on their project. Collaboration is not allowed, and each student should submit their unique work.
- **Version Control (Git):** Create a GitHub repository to host your capstone project. Use non-main branches for development and create Pull Requests to merge major features. Commit frequently with descriptive messages to show your progress.
- **Academic Integrity:** Do not copy or reuse code from previous modules or external sources. The mid project is a showcase of your learning progress.
- **Learning References:** You may refer to course materials and code examples as learning references but implement your solutions independently.
- **Instructor Support:** The instructor will be available for general questions and guidance throughout the project.

Minimum Requirements

- 1- Use 2D Array.
- 2- Use method.

- 3- Should Display a Game Board.
- 4- Ask player position.
- 5- Check if the position available, if not available keep asking the player to enter a valid position.
- 6- Computer chose random position and check valid position.
- 7- Checks if either player or Computer has won.

Ideas for extra credit

Beyond the minimum requirements, you are encouraged to use your imagination to make this application as nice and complete as you wish.

Below are some ideas you might find interesting, but you are not restricted to them.

The user has two options:

- 1- Play one round
- 2- Play 3 rounds and then determine the winner

Resources

These are some resources that may help you in implements the project:

<https://www.w3schools.com/>

<https://www.javatpoint.com/>