

ComIT Individual Final Project
Project Proposal

Timoc – A Web Based Card Game

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Background

Each student in the ComIT class is required to build a web application for their final project. The application must have a functional front-end and back-end. In this project, a web based card game is chosen to be the topic. This project includes two front-end interfaces and a back-end server with database. The project is to be finished by the presentation date(TBA) at late August.

Overview

Timoc is a multiplayer card game playable on browsers. It is intended to be played by up to four players in the same room, using their smart phones as controllers and one screen as a display. To start a game, the browser on the display screen connects to the server, the server responses with a web interface containing a code. The players also connect their smart phone browsers to the server and receive an interface asking for a code. The players then enter the code shown on the display to join the game session.

During the game, players will play cards in turn to battle incoming monsters. Their hands of cards are shown on their phones and they play cards by tapping at them. As players progress, they are rewarded with randomly generated cards to their collections, along with some game currency. Players are able to use the rewarded cards in future battles, or put them up on a market place for sell.

There is a market place listing the trade offers by all players. The interface to the market place includes filters to assist shoppers find what they are looking for.

All interactive interfaces such as the market place and card picking are shown on the phone. The display browser takes no input and is only used during battles.

The project includes a user account system. Players must enter a username, a password and an email to register an account and they have to login before they can enter the gameplay.

All game logic is processed by the server. Information saved in the database includes player accounts, player information such as progress and card collections, market place trade offers and game session information.

Objectives

Learning required knowledge

June 1st - June 15th

In order to finish this project, the required knowledge such as servlet, jsp and database must be learned early so that the implementation can start early.

Account register and login

June 15th – June 18th

Develop a system that allows users to register and account, login and logout. Account information are stored in database and accessible by the server.

Game session generation and joiningJune 19th – June 20th

Develop a system that allows display browsers to request new game sessions and the controller browsers to join sessions. Game sessions should be alive until all related browsers disconnect.

Functionalities regarding players, such as card collection managementJune 21st – June 27th

Develop the interfaces and functionalities for players to view and management their collections. Player information is stored and accessible in the database.

Gameplay battle systemJune 28th – July 15th

Develop the gameplay interfaces for both display and controller. Develop the game logics for battle gameplays. Players are able to use their cards and the server handles the calculations and responses correctly. Battle progress is temporarily stored on the server.

Market placeJuly 15th – July 31st

Players are able to set up trade offers and view all offers from other players. The interface has filters to help players find relevant offers. Offers expire and are removed by the server after a certain period.

Interface and overall polishingAugust 1st – Presentation Date

Design a theme and decorate all interfaces with images and CSS.

Additional Objectives

The following objectives are to be considered implementing after the course is finished or if there is enough time to implement before the presentation. Since the main purpose of the final project is to learn and practice Java programming, the priorities of these objectives are determined by how much can be learned from the development and their significance to the overall functionalities.

Anti-spam support

Have the ability to avoid spam, mainly in register, login and new session request.

Password reset and recovery

Ability to send emails to players to assist password reset or recovery

More game contents

More game content for fun

Sound and music

Improve user experience by adding sound effect

Reconnect

Allow player to reconnect to session after accidental disconnection, as long as the session is still alive.