

EECS 2311 X
Group2
Warhammer 40K Easy Combat

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Vision Statement

This is a software designed to assist in Warhammer 40,000 battles, offering various scoring and support functions to make combat easier. The application will be developed using Java, JavaFX, and SQLite.

This is a standalone app, and because the game this app wants to support is a tabletop game based on the physical models, which normally requires physics calculations for various scores. This app can simplify some of the operations. The game's rulebook and datasheets are released based on physical copies. Under normal circumstances, it is impossible to add rules through methods other than manual entry. To make input easier, the app may provide some commonly used rule templates and block based enter for data entry.

The software will provide virtual dice to help players complete a large number of throws and calculations more quickly and easily. It also provides simple attack selection and automatic calculation functions for new players who are not familiar with the rules. The software's command point and victory point calculation functions can help all players reduce their workload while playing, and all numerical changes will be recorded to prevent errors in the number input. Mission selection will be related to victory points; completing missions will increase victory points. Missions are divided into primary and secondary missions, and players can choose to draw missions or select fixed missions.

In its early stages, the software will simplify code development by requiring users to manually input rules and data. Later versions will add a simple rule-based module system that allows new rules to be injected into the software, enabling custom calculations. The game is divided into core rules and faction rules. The rules for different factions differ greatly and vary in complexity. Therefore, early versions of the software will only include a few test factions and related numerical calculations.

This software will significantly reduce players' calculation and settlement time, speeding up the game pace and allowing players to pause matches and resume them later. New player-friendly features will also help novice players quickly familiarize themselves with the game rules and reduce the learning curve.

The software will be considered successful if it reduces player calculations and improves efficiency, reduces the learning curve for new players, allows the game to resume after being interrupted, and reduces game time by 15% to 30%.

Big user stories

Battle Log

Record any actions taken during combat, which can be exported as a save file. Exported incomplete save files can be read and continue the battle from where left off.

Priority: High

Cost:

Victory Point (VP) and Mission

Can choose a random mission card or a fixed mission card. Clicking "Mission Completed" when you finish a task will increase your victory points. The side with the higher victory points at the end of the game wins.

Priority: High

Cost:

Command Points (CP) Calculation

By default, one point is added per round; an additional point can be added by character related ability. During combat, players can choose strategies that can be used at the corresponding phase and automatically reduce points.

Priority: High

Cost:

Rule and Datasheets Entry

The basic functionality allows players to manually enter rules, but they cannot modify some of the system's default rules. If development proceeds smoothly, advanced features such as Scratch coding will be added to allow players to customize some events.

Priority: High

Cost:

Iteration 1 Detailed User Stories

Rule and Datasheets Entry

The basic functionality allows players to manually enter rules, but they cannot modify some of the system's default rules. Add corresponding entries for different types of units to simplify some input.

Priority: High

Cost:

Virtual Dice

Automatically selects the required number of throws based on the current status, or can set the number of throws manually.

Priority: Medium

Cost:

Combat Support

An auxiliary mode can be selected to directly calculate the unit data for both sides and perform corresponding additions and subtractions.

Priority: Medium

Cost:

Rule Searching and Viewing

Players can view and search for game rules and unit data at any time.

Priority: Medium

Cost:

Army import or create

Players can create their own army tables or import them from the official app.

Priority: Low

Cost: