

CSCI 188 Project Proposal

Minesweeper

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Brian Cavanaugh

1. Project Abstract

Mathematically determine the location of deadly mines in this mobile port of a classic computer game.

2. Strategy

Starting with a GameCanvas gridded into tiles hiding a number of randomly placed mines, the tiles will change depending on which squares are selected. The tiles near the mines will indicate how many mines are adjacent to the selected tile. The game will allow for a highscore page using fastest times as highscores. I plan on using the trackball feature of my Blackberry Tour as the method of selection.

3. Unknowns & Problems

I'm not yet familiar with the trackball nor with the tiling in the GameCanvas. I do not anticipate either of these things being a large problem as the Blackberry development kit seems to be mostly complete with documentation and the book covers tiling in the GameCanvas. One other challenge will be to use the timer to get the highscore times as this might be difficult to make generalizable.

4. Implementation Plan

The first step is setting up the GameCanvas to display the grid. Next, the game logic must follow the logic of the minesweeper game. Finally, the last step is incorporating a timer to log the high scores, aka low times.

Figure 1. A possible game GUI layout. (taken from Microsoft Windows)