Testing Report

This document describes the the testing approach that our group took. We were tasked with testing group Fett's game. We came up with a testing strategy that is detailed below. We implemented this strategy and effectively discovered a few bugs. It should be noted that the state of the project was not very far along so there are not too many things to test. We also tried to mention some features and small improvements to the current game play.

Game Tested
- Group Fett

Testing plan
1. Test inputs at menus. These menus ask for a letter to be input.
   - Test null input
   - Test letters not in the menu
   - Test numbers
   - Test words
2. Test in-game menu. This menu requires you to move a selector over a menu item and press enter
   - Try all menu items (manual mentions they are not all active)
   - Try pressing other keys while in menu
3. Test moving around in the world
   - Test normal keys
   - Try to move out of map
   - Press different buttons while in move mode
   - Play the game as directed
4. Test Character names for saving and loading
   - Test really long names
   - Test names with different character types
   - Test names with characters that will not work for Linux file names
5. Try re-sizing the window
6. Ad-hock testing
7. Try to identify improvements to the user experience
   - How could experience be made more intuitive
   - How to improve instruction
   - How to improve user experience

Testing Results

1. Start menu input test results
   - Null input: segfault
   - Characters not in menu (d, m, z, !, *): segfaults
   - Capital letters (A, B): Works as expected
   - Letters in menu: C segfaults, A and B work as expected.
   - Numbers (1, 1000, -1): All numbers segfaults

- Words and sentences (steve, hello world!): segfaults
- The results of this testing showed that there was no error handling for any kind of input other than the expected kind. It did not make a difference what kind of input given, only a,b,A,B are accepted.

2. Try all in-game menu input results
   - Try all menu items: All implemented menu items work as expected under normal use. The teams user manual mentions that some of the menu items are not yet finished, so these were not expected to work. However, the unimplemented menu items did not result in any errors or crashes.
   - Try pressing other keys while in menu: Nothing happens as expected.
   - The only bug we found when testing the in game menu was combined with moving around the map. When you enter doors it brings you back to the menu to select things again. And if you just press move again right away it will activate the select tile menu item. This was not something we tried to test, but resulted from testing the movement behavior of the game.

3. Test moving around the world results
   - Test the normal keys: All functioned as expected
   - Try moving out of the map: Could not do this as expected.
   - Try pressing other keys: Nothing happens as expected. (for reasonable keys like number, letter, and symbol keys)
   - Play game as directed: Tried moving around the map and entering doors. The actions are done as expected. However, we submitted a feature request because entering doors puts you back to select a menu item again. This is not really desired as when we go through a door we do not expect to have to select move again.

4. Test character names for saving and loading results
   - Names with characters that are not allowed by Linux in a players name segfault.
   - Long names for a character are accepted, but do not save properly. When loading these names the game does not find the file. However it handles the error and starts a new game with that name.

5. Re-sizing the screen
   - This cause d the game to break. It made the terminal very distorted and unplayable. If the dimensions were restored to the terminal window the map was visible again, but parts of it were off the screen. This made it necessary to quit, or even close the terminal if the menu had been moved off screen.

6. Ad-hock testing results
   - This phase really did not amount to much. The game we tested had very little functionality. We just played it as much as we could and discovered no new bugs.

7. Try to identify the user experience improvements
   - We found that there were several things about the user experience that could be improved and submitted our recommendations as issues.
   - When we played the game entering doors made us move to the menu and select move again. This was most likely because the button for entering a door and accessing the menu were the same. We suggested making these separate buttons so that the user experience could be better when moving around the game map.
   - Another issue was that when you quit the game the screen was not cleared nicely. Whatever method that the team used to print to the screen stayed displayed underneath the terminal prompt. This made it necessary to clear your terminal manually on exit. We suggested that they do something to clear the screen on game exit.