Courageous

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Date: 4/9/2013   **Classification**: Senior

Overview

Courageous is a text based adventure game with puzzle, design, and building elements. The player becomes the character, and throughout the game basic fundamentals of programming will be introduced as new skills your character can use to solve puzzles and design solutions to the problems faced in the game. The game is meant to be an introduction to basic java, since it is a good introductory language. The functions of programming that will be introduced are vast yet they will be introduced slowly to give the player a well distributed difficulty curve for the game without letting them on that they are learning. The game will keep statistics on the player as the game is played, showing how well each function has been mastered. More in depth statistics would show how many times each function was used correctly and incorrectly. The challenges will tailor themselves to what most needs to be learned.

The player will be going through a game world that is only expressed through text; the world is in disarray and must be put back together by reprogramming it. As in programming, when the player is given enough skills there will be multiple ways to solve each problem as long as the solution is the same the process to the solution won't matter as much. Optimization and efficiency is a big problem in computer science so when a problem is met there will be a goal solution, if the code written is longer than the goal solution then the score will not be as high, but if it is equal to or under the amount of code a higher score will be awarded. There will only be one "level", since the game is a world that can be explored. The game can be saved at any point using the correct command for it. A sample of functions to be given early in the game:

- Println(); , Allows for dialogue with other characters
- toString(); , Allows conversion of Numbers to words and/or letters
- compareTo();, compares two objects that have been mentioned in game
- While();, allows the player to loop for problem solving

The game is set in the future; technology has been deteriorating reality for many years. In its current state reality will vanish in less than a year. The player must rebuild and fix reality by correcting the corrupt programming of the machines and solving the puzzles and challenges placed before them.

The art style will begin very basic, with extremely simple ASCII art. The text will be white on a black background, as the games continues the art style will change slightly allowing the right half of the screen to show the world through both text and art, at first it will be 8 bit, then as more challenges are completed the world will be shown in higher quality (max of 64 bit). The sounds will be chiptunes, similar to what would be heard in many NES or SNES games.

Justification and proof of merit

The game will teach the player the fundamentals of programming in Java, which can be applied to many other languages. The player will immediately begin to see the programming as a solution to "real world" problems instead of as an assignment. Statistics will be taken throughout the game to help determine mastery over certain functions and whether or not they are being used correctly, both syntactically and functionally. It will teach different variables types, data manipulation (number and string), and loops.

Target Platform: PC

Target Audience: people interested in beginning programming

Project Scope: 2 Semesters

Resources: Text based adventure engine, or Unity

Team Size:

-Creative Director/Producer

-3 Programmers

-2D Artist

-Sound Designer