

Working, Loving, Programming!!

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The key features implemented in this scenario are the saving/loading, viewing player statistics, interaction with non-player characters, and four sample coding puzzles.

Playing Puzzles

The player will start the game from the WorkingLovingProgramming application. Before the game loads into the start screen, it will have a splash screen with the title of the game, group members, and logo. Then a start screen will appear with various options that the player can select: **New Game**: The Player can start a fresh new game; **Continue**: For loading the previous saved game state; **Quit**: To quit the game.

When the player selects the **Continue** option, the game will load the save state slot that has been saved locally to the player's Android device via the system shared preferences. After clicking continue, the user will be shown a pop-up box to confirm loading of the save state, with options "yes"/"no". Upon clicking yes, the player must be sent to the "office map" screen, a dialog interaction scene with an NPC, or a coding puzzle interaction screen. Upon clicking no, the user will be sent back to the main menu.

The player selects "New Game" and enters "bob" as the main character's name. After the submission of the player's name, a short prologue will start a dialogue screen which will give a brief background information about the main character and the game setting: the player is a new hiree at *ProgPuzzle Co.* and needs to assist their colleagues. The colleagues each specialize in a programming language and often request help from the player. As the player helps each colleague, they may find themselves falling in love with the new hiree.

After the prologue is finished the player will be in an office environment and the movement around the office will be point-and-click map interface. Rooms that are included are the lounge, cubicles, boss office, outdoor park. Each location contains the following characters: company lounge - SQL, cubicles - C++, boss's office - Assembly, and company cafeteria - Python.

When the player selects a location on the map the game will transition to the location's environment and starts a one-time brief intro sequence describing the location and character within it and when the player revisits the location it will skip the intro and directly start a greeting dialogue with the respective character of that location. During the dialogue sequence, the player has to click on the screen to continue the dialogue and once the dialogue is finished the player will have a few dialogue options to choose from such as, "talk", "help", and "leave".

When the player selects “help”, they will return back to the unsolved puzzle. This option only appears when the user quits a puzzle that the NPC shows them beforehand.

When the player selects “leave”, they will be transitioned back to the map menu screen to choose other map locations.

When the player selects the dialogue option “talk”, depending on the room the player is in, it will initiate a dialogue with the respective character that will lead to solving a coding puzzle for that character, each character will have their own sets of coding puzzles depending on their main programming language (C, Java, Python, etc.). The game will then transition from the dialogue screen into the puzzle screen where the player will need to solve a randomly chosen puzzle such as fill-in-the-blanks in code snippets, drag-and-drop code pieces, and manually typing code to complete the coding puzzles. When the player completes the puzzle or clicks the back button in the middle of the coding puzzle, the player will be transitioned back to the choice dialogue options.

As the user completes these puzzles they will be rewarded points called “credibility”. Each puzzle has an initial credibility rating. For example, if the player encounters a puzzle with a credibility rating of 100 and another puzzle with rating 20, they can expect the 100 point puzzle to be more challenging. Each time a user fails a puzzle, the less points they awarded. If the initial credibility rating of a puzzle is 100 and the player offers incorrect solutions, the credibility reward would drop 5 points each time. The higher the credibility points you have in certain languages, the more “credible” you are in that language. Colleagues are more likely to fall in love with the main character if they are credible in the language that they specialize in.

After the player has decided to stop playing, the player must go back to the start menu using Android’s back button to select the Quit button which a pop up screen appears to prompt the user to confirm whether or not to exit the application. The application will exit upon pressing “Yes” and go back to the starting screen upon exiting “no.”