

CIS-18A Project Documentation

Case 1: Business Program

R2R “Right 2 Repair” Solutions

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Project Information & Details :

1. What problems are you solving in this project?

- This program seeks to grant ease of use and access to an end user when trying to purchase solutions from a business; in this specific instance, the program will allow users requesting phone/tech repairs to issue their problems in tickets, while also choosing a date to set their appointments to visit the repair shop. By developing an app, users can issue these requests in the comfort of their homes.

2. What solutions are you implementing in the project?

- By utilizing an easy to traverse options menu, a custom entry point for specific repair notes, and a calendar system. The process for creating a repair ticket has been heavily taken into consideration, and our program offers a scalable, streamlined solution.

3. What is the program objectives? Explain how your program is interacting with the user and its purpose.

- The program offers a UI for users to schedule and report issues with devices/phones. Through an options menu, users can create and view tickets they've created and sent to the business department.

4. What are the limitations of the program?

- As of now, the program is limited to creating one ticket at a time for the end user. Editing information per ticket is also limited. Security is also to be taken into consideration, as field inputs are not yet designed for input validation and control.

5. Provide recommendations on improving the limitations of the program.

- In future iterations, ArrayList can be implemented to allow end users to create a larger amount of appointments/tickets as needed.
- Editing ticket information is doable by allowing users to view and select which ticket they'd like to edit, and from there, what they want to edit/redo.
- Adding catch/throw & conditional statements to ensure input is to standard will ensure security of the program.

Pseudocode :

```
declare UserInterface interface
- outputMenu method
- createTicket method
- viewTicket method
declare TicketCreator class
- Instance variables device type, issue, date, email
- declare Constructor method
- Getter and Setter mutator methods

declare R2RSolutions class
  declare main method
    - declare scanner object on program launch
    - declare TicketCreator object on program launch.
    - declare while-loop until exit key/button pressed
      - output menu/UI prompt
      - Enter switch statement based on Scanner info
      - based on input, either createTicket method, or
        viewTicket method, or exit
    - //UI is optional, but SwingUI may be implemented via
      date picker, input box, and drop down menu.
    - exit statement on exit key
  end main method

  initialize outputMenu method
    - print menu/ui statements
  initialize createTicket method
    - prompt user for input with scanner object
    - set mutators to scanner info
  initialize viewTicket method
    - print ticket info
```