

Simple COMP 354

Flashcard tool

Version 0.2

Implementation / Testing Document

Produced for:

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Executive Overview

The Simply COMP 354 Flashcard Tool will be a program to facilitate and accelerate the teaching and learning of materials using computerized flash cards. It will act as an interface where the user can study and practice specific materials at their leisure and own pace. It will be available for use at home or in educational environments.

Introduction

The primary goal of this project is to develop a Simple COMP354 Flashcard Tool (SCFT).

The purpose of this implementation document is to provide all details of the implementation of the Simple COMP354 Flashcard Tool (SCFT). The document will include the tests made, which testing style has been chosen, followed by a real implementation of the game using Java language.

1. Purpose

The purpose of this document is to present the design of the Simple COMP354 Flashcard Tool (SCFT), which is in partial fulfillment of the requirements of the COMP 354. It will provide details on testing and how the game was implemented. It will follow a white-box and a branch testing of 3 different methods. The document will also talk about which type of unit integration test was performed. Followed by screenshots, the working prototype will be shown.

2. Project Scope

This document is intended to provide the details of the actual implementation of the Simple COMP354 Flashcard Tool that will be used as a basis for the implementation phase. The test technique that is used will be explained in great detail in order to give the idea of how the game was implemented. Furthermore, screen shots of the game will provide a basis for the actual graphical user interface used in the game. The white-box and branch tests will follow for 3 different methods.

3. Document Preview

The intended audiences of stakeholders for this specification of the SCFT include:

Concordia Staff, who are any teachers or employees who commissioned the product:

Dr. Juergen Rilling, who commissioned this project on behalf of Concordia and must approve it.

TA's, who may help evaluate the product.

Deck Designers, who will create new decks for the product after release.

Comp 354 Group C:

who are all the individual who take part in creating the SCFT and must consult and update this document as well as meet any specifications herein:

Marc Leduc

Nazli Bozoglu

Wadih El-Ghoussoubi

The remainder of this document is divided into four major parts: The actual implementation document to tell which libraries used, white-box was testing with a branch testing, screen captures, and the major changes between the design document and this final implementation.

3. General Look

3.1 Introduction

The prototype works partially. User can select one of the three decks, play, see the correct result and quit the game. There is no statistics.

No integration with the other group. Even though we were less than we should be (3 instead of 4), we thought we do not need to integrate with other groups.

Apart from the libraries included in NetBeans, no other library was used for the implementation of the document. For the questions and answers, XML was used for I/O implementation of the Java classes.

Instead of having SQL and getting questions/ answers from a database, an XML implementation was used.

For some of the multiple choice questions, the text was too big for the buttons. We did not have enough time to fix it.

3.2 Screen Shots

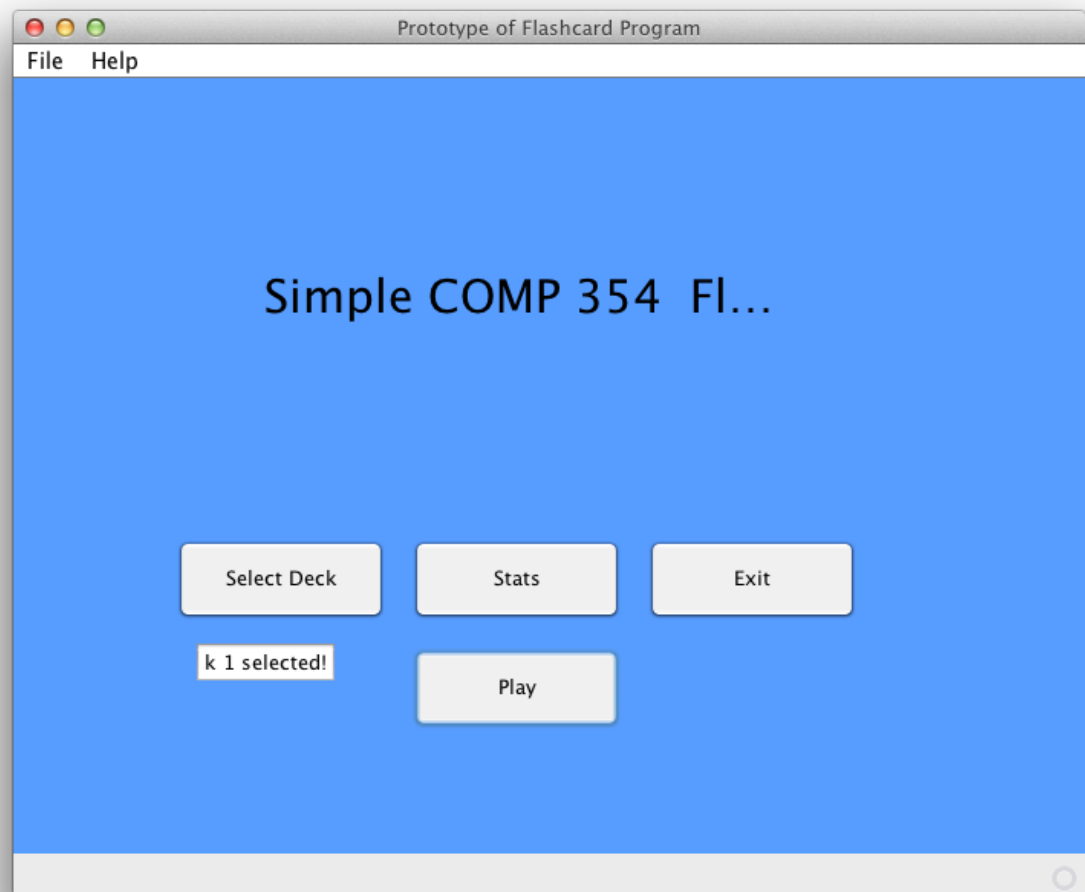


Figure 1: The Main Screen

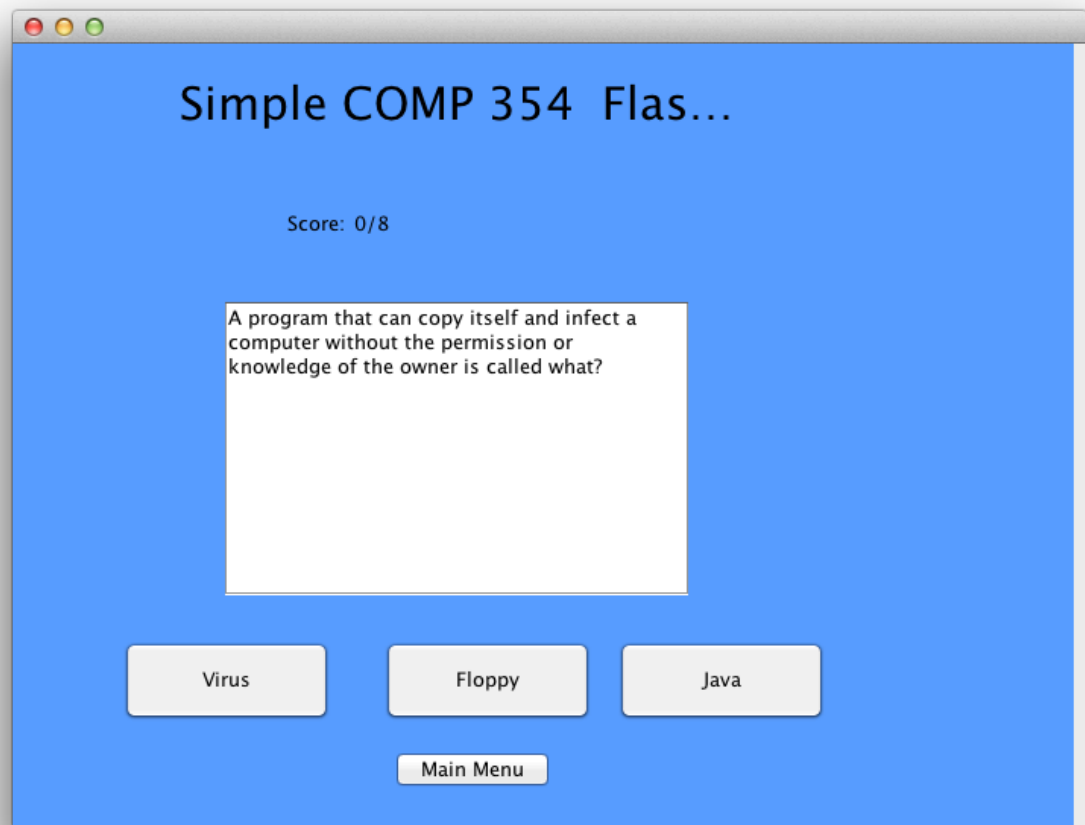


Figure 2: A first question example.

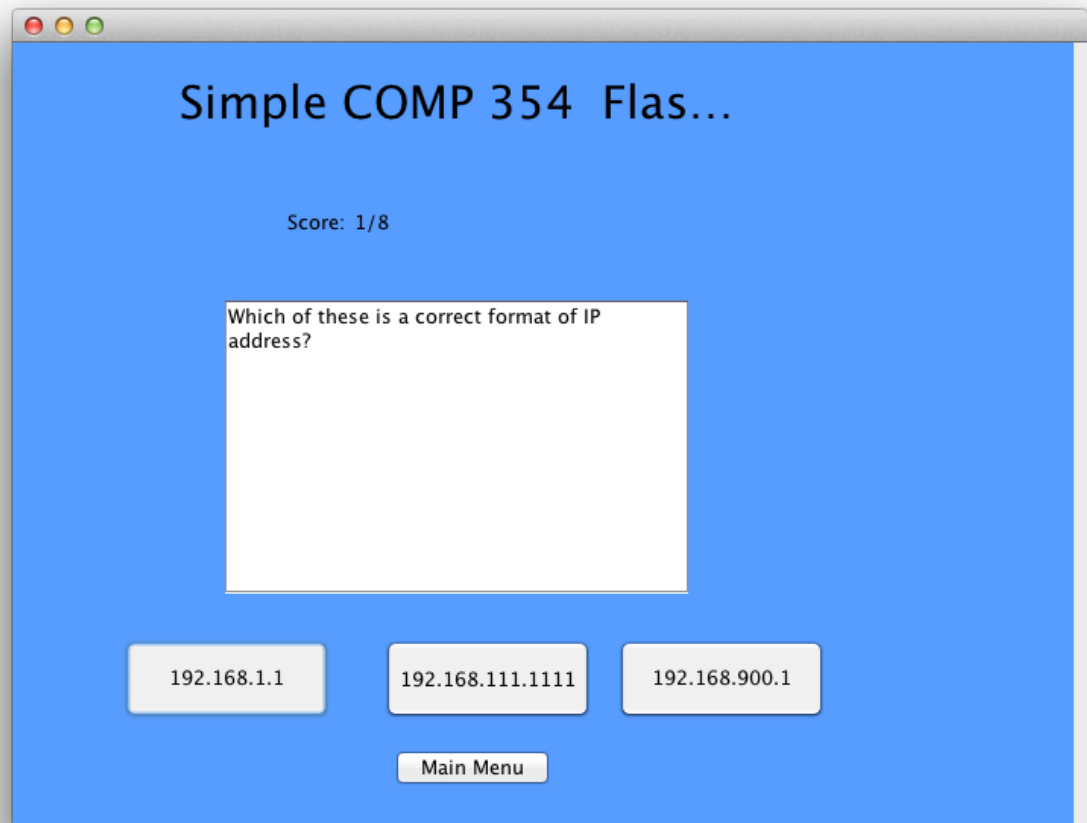


Figure 3: A second question example after the first scored right.

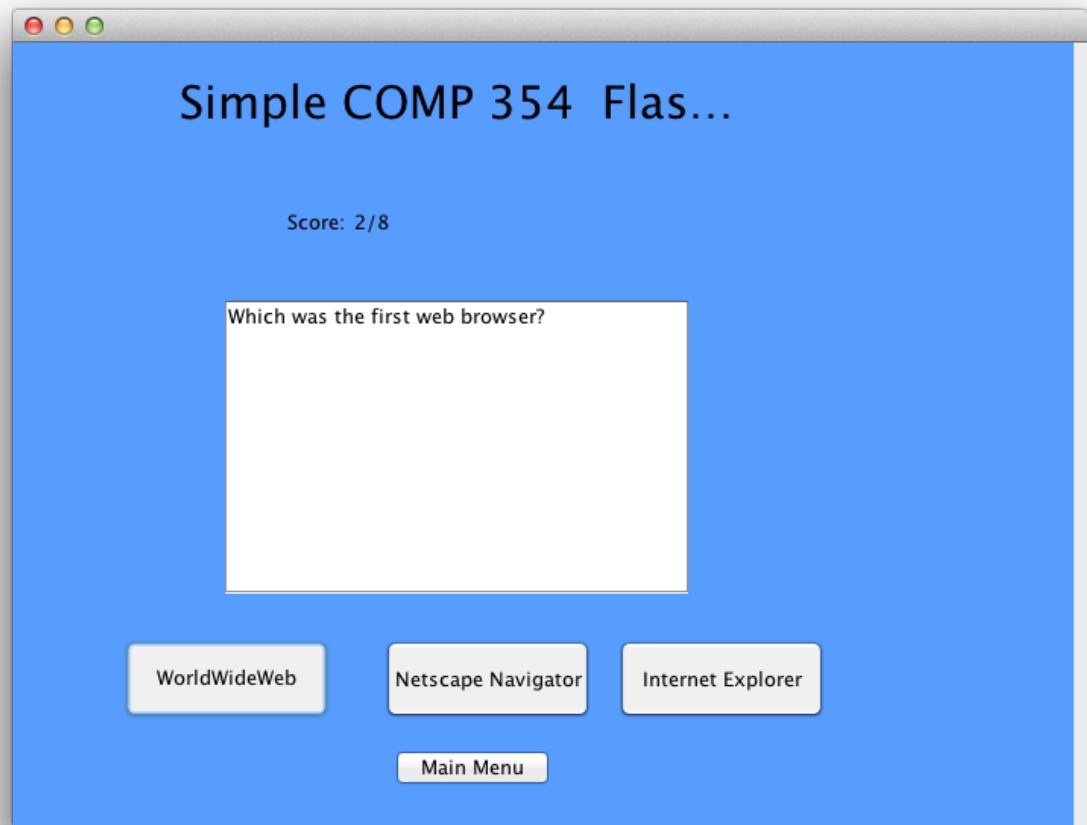
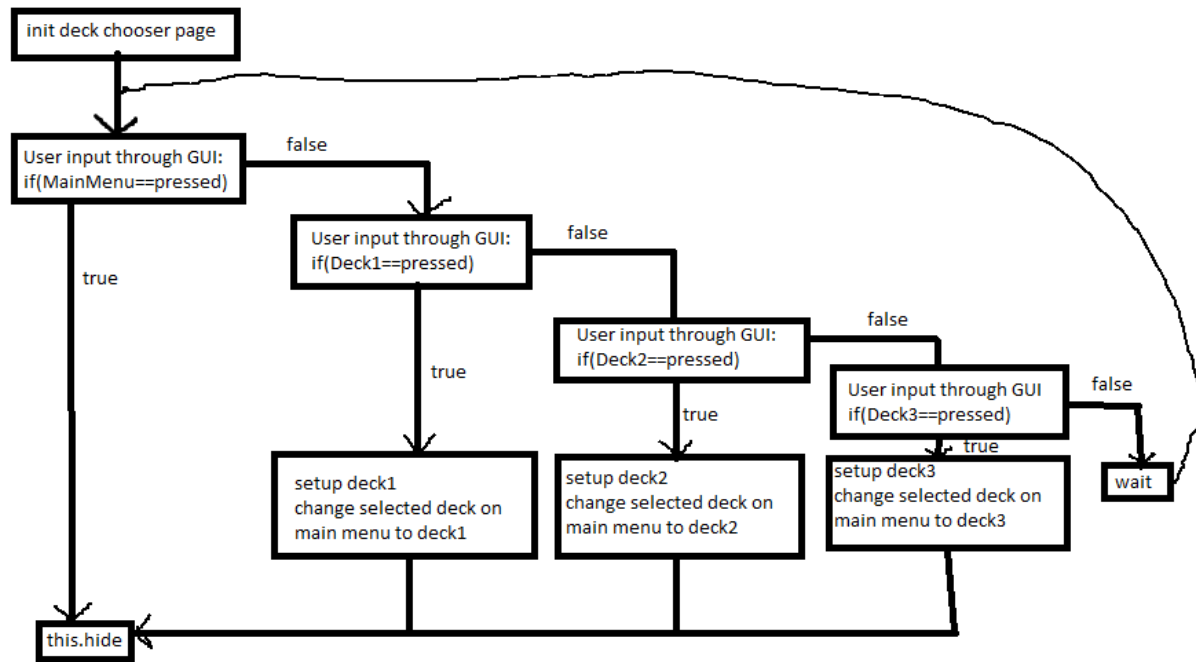


Figure 4: The second question example after the second correct answer.

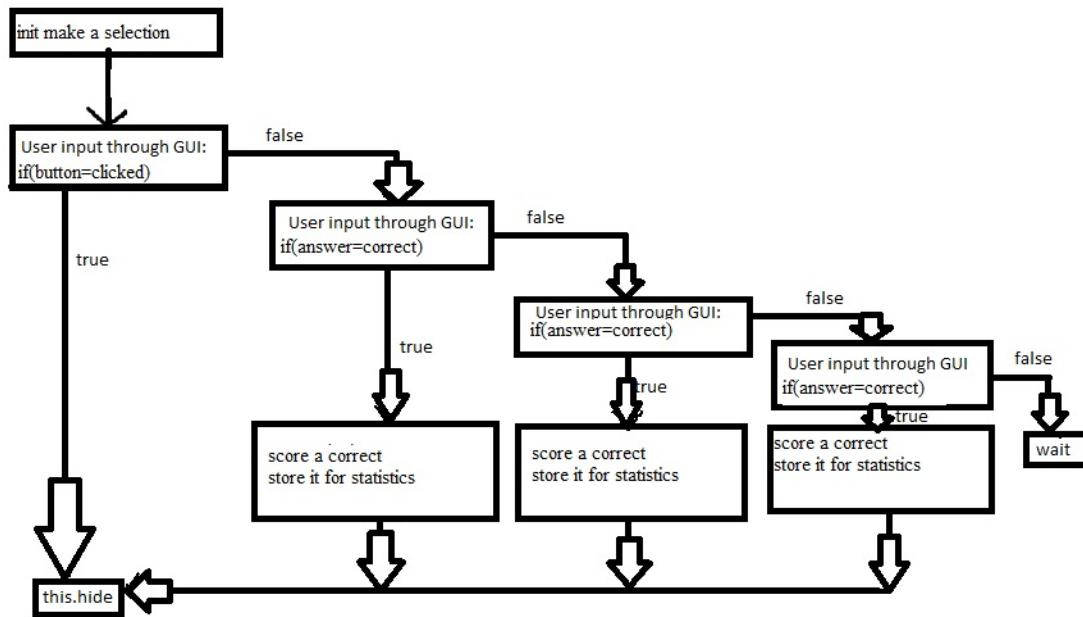
4. White-Box Testing

4.1 Test for Selecting Deck



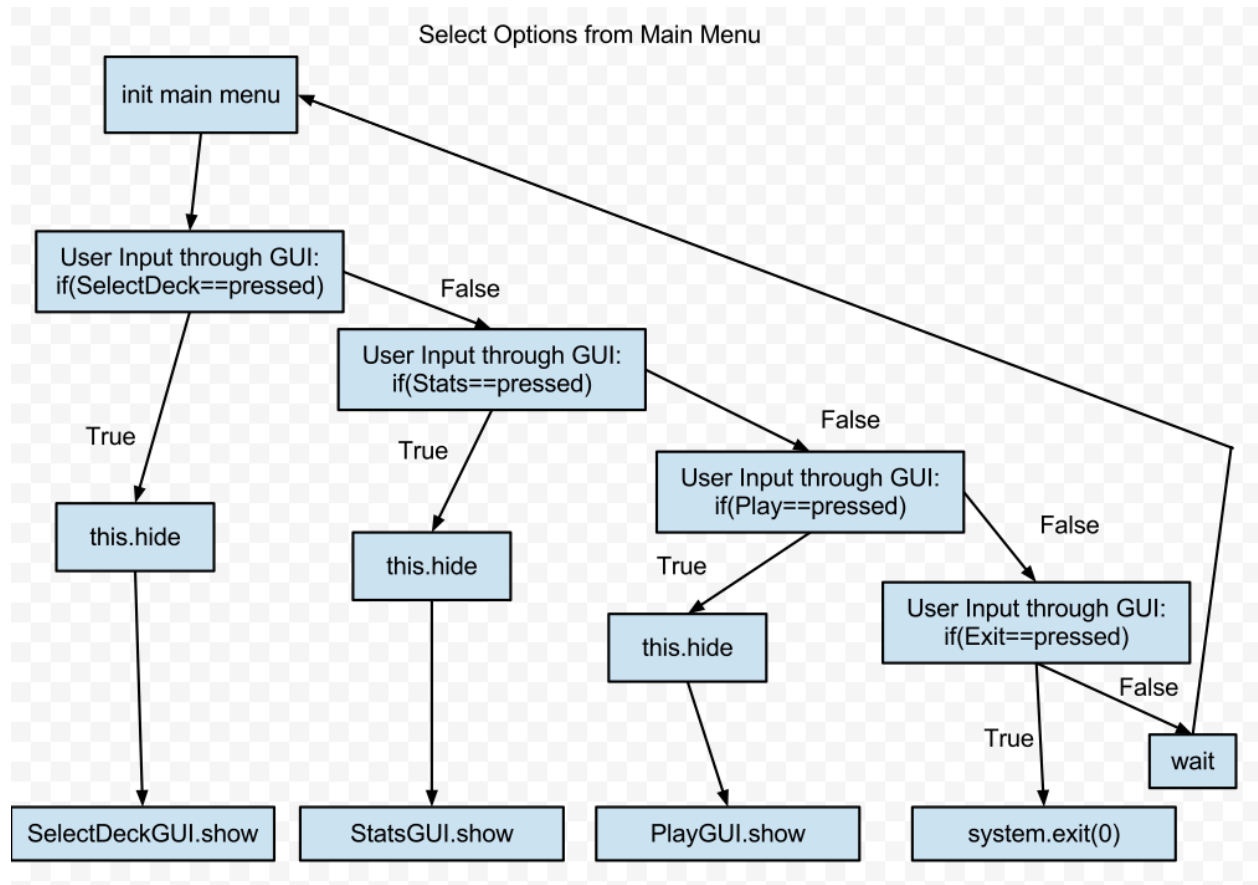
Test#	Input:
1	button "Main menu"
2	button "Deck 1"
3	button "Deck 2"
4	button "Deck 3"

4.2 Test for Answering Questions in Play



Test#	Input:
1	button "A"
2	button "B"
3	button "C"

4.3 Test for Select Options from the Main Menu



Test #	Input:
1	button "SelectDeck"
2	button "Stats"
3	button "Play"
4	button "Exit"

5. Integration and System Testing

For the testing, Top- down and bottom- up tests were used. Overall, we used Sandwich testing and Unit testing for our Simple COMP 354 Flashcard Tool.