Development and Testing

Table of Contents

[Chapter Three: Development and Testing 2](file:///C:\Users\Aissa\Desktop\Project%20Template%20New%202020\NEW%20Developmenet%20and%20testing%20Template.docx#_Toc36797623)

[3.1 Introduction 3](#_Toc36797624)

[3.2.1 Stage 1: Building the Database 3](#_Toc36797625)

[3.2.1.1 SQLITE + Python Code 3](#_Toc36797626)

[3.2.1.2 Testing Databases 3](#_Toc36797627)

[3.1.3 Feedback from Stakeholder (if appropriate) 4](#_Toc36797628)

[3.1.4 Review and Corrections 4](#_Toc36797629)

[3.2.2 Stage 2: Building Log in 4](#_Toc36797630)

[3.2.2.1 The Code for Log in section (including validation) 4](#_Toc36797631)

[3.2.2.2 Testing Log in section (including validation) 4](#_Toc36797632)

[3.2.2.3 Feedback from Stakeholder (if appropriate) 4](#_Toc36797633)

[3.2.2.4 Improvements and Corrections 4](#_Toc36797634)

[3.2.3 Stage 3: Building …….. PART THREE …. 5](#_Toc36797635)

[3.2.3.1 Code for …Part THREE … including validation 5](#_Toc36797636)

[3.2.3.2 Testing …. Part THREE ….including validation 5](#_Toc36797637)

[3.2.3.3 Feedback from Stakeholder (if appropriate) 5](#_Toc36797638)

[3.2.3.4 Improvements and Corrections 5](#_Toc36797639)

[3.2.3 Stage 4: Building …….. PART FOUR …. 6](#_Toc36797640)

[3.2.3.1 Code For … part FOUR… (including validation) 6](#_Toc36797641)

[3.2.3.2 Testing …. Part FOUR ….including validation 6](#_Toc36797642)

[3.2.3.3 Feedback from Stakeholder (if appropriate) 6](#_Toc36797643)

[3.2.3.4 Improvements and Corrections 6](#_Toc36797644)

[3.2.4 Stage 2: Building …….. PART FIVE …. 7](#_Toc36797645)

[3.2.4.1 Code for … Part FIVE… including validation 7](#_Toc36797646)

[3.2.4.2 Testing …. Part FIVE ….including validation 7](#_Toc36797647)

[3.2.4.3 Feedback from Stakeholder (if appropriate) 7](#_Toc36797648)

[3.2.4.4 Improvements and Corrections 7](#_Toc36797649)

[3.3 Final Improvements and Corrective Actions 7](#_Toc36797650)

# Chapter Three: Development and Testing

Development and Testing

## 3.1 Introduction

When programming my project, I will use a modular approach. This means I will use the fact that I have decomposed the project into many smaller sections and I will first test each of these sections or modules separately. In the code, each module can import other modules, when necessary, in order to be able to run a function from another module. This approach allows for reusability of code and also improves the readability and ease of editing the code.

I will use sqlite3 in order to build by database. This will mean the database is stored locally on one machine rather than on an online server. This makes it more suitable for a low number of users or even a single user. Because my project is single-player and is not an online game, it is not important that the database can only be accessed from one device.

I have decided to use Python 3.1, because it is the programming language that I feel the most comfortable with. There is also a wide range of libraries available, some of which will be used in my game.

I will use Tkinter for the login part of the project as well as displaying popup messages. This allows me to create a user-friendly, visually appealing interface that the user will use to log in.

## 3.2.1 Stage 1: Building the Database

### 3.2.1.1 SQLITE + Python Code

### 3.2.1.2 Testing Databases

### 3.1.3 Feedback from Stakeholder (if appropriate)

### 3.1.4 Review

## 3.2.2 Stage 2: Building Log in

### 3.2.2.1 The Code for Log in section (including validation)

### 3.2.2.2 Testing Log in section (including validation)

### 3.2.2.3 Feedback from Stakeholder (if appropriate)

### 3.2.2.4 Review

## 3.2.3 Stage 3: Building …….. PART THREE ….

### 3.2.3.1 Code for …Part THREE … including validation

### 3.2.3.2 Testing …. Part THREE ….including validation

### 3.2.3.3 Feedback from Stakeholder (if appropriate)

### 3.2.3.4 Review

## 3.2.3 Stage 4: Building …….. PART FOUR ….

### 3.2.3.1 Code For … part FOUR… (including validation)

### 3.2.3.2 Testing …. Part FOUR ….including validation

### 3.2.3.3 Feedback from Stakeholder (if appropriate)

### 3.2.3.4 Review

## 3.2.4 Stage 2: Building …….. PART FIVE ….

### 3.2.4.1 Code for … Part FIVE… including validation

### 3.2.4.2 Testing …. Part FIVE ….including validation

### 3.2.4.3 Feedback from Stakeholder (if appropriate)

### 3.2.4.4 Review

## 3.3 Final Review, Improvements and Corrective Actions