**City Tech Innovations (Group 21)**

**Implementation Report Version 1.1 – Final Document**

**Client:**

• Mr Lancaster (AirVia LTD)

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**Version History:**

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| Version | Note | Date | Author |
| 1.0 | Added the introduction and general formatting to the document | 06.04.2023 | AA |
| 1.1 | Added the test plan and my use test cases. | 06.04.2023 | AA |
| 1.2 |  |  |  |
| 1.3 |  |  |  |

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**Introduction**

Dear Mr Lancaster,

My team and I had the pleasure of developing and testing your envisioned product. Over the last six weeks we have developed a product based on the analysis we carried out in the first deliverable and the requirements which you have specified, through several software development methodologies. In addition to this we have also carried out rigorous testing on your envisioned product which will ensure enhanced performance and ensuring stability throughout the products lifecycle. This is through methodologies such as use test cases to check whether the functionalities of your proposed product align with our analysis and your specification. In addition to this we have also carried out unit testing which will ensure that the code functions as intended. With this report we present to you, our creation of your product. Once again, we thank you for choosing City Tech Innovations (CTI).

Kind regards,

The City Tech Innovations (CTI) team.

**Details of compilation**

**Details of run-time infrastructure**

**Testing plan**

**Introduction:**

The objective of testing this software is to test the features which are required according to the specification, testing features which are not stated within the specification but may enhance system performance and ensuring stability throughout the product lifecycle, In addition to checking for bugs.

**Scope of testing:**

In this project we intend to test the ten core functionalities of the AirVia ticketing system (ATS). The ten core functionalities are: voidBlank, produceBlankReport, createSalesReport, payLater, createIndividualReport, reassignBlank, cancel Ticket, recordTransaction, sellTickets, alteringTravelAdvisor.

We will be testing the core functionalities using unit testing which runs tests on specific areas and functionalities of a software product by inputting some test data to see how it will behave in response.

**Tools used to execute testing:**

UML Use test cases

IntelliJ idea unit testing tool

**Testing strategy:**

The strategy for our testing will be the following:

Whenever a specific unit of our testing is complete a tester will complete unit tests on the unit.

When the whole system is complete, we will carry out the use test cases, which will allow us to find irregularities between the specification and the system that has been developed.

The findings will be reported directly to the developer responsible for the unit, which was tested, and the necessary changes will be made to the code if the test fails.

This will be a recursive process, until all the tests have passed.

**Test report**

**Use case testing:**

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| --- |
| Use case ID:TM01 |
| Use case name:VoidBlank |
| Test number:1 |
| Objective: To test the main flow |
| Set up: The tester will be logged in and will be commencing the creation of a blank. |
| Expected results:  1.The system will output: “Are you sure?”  2.The system will terminate the flow and return to the previous state.  3.The system no longer recorded as issued. |
| Test:  1.The tester will start the creation of a use case.  2.The tester will then make a mistake.  3.The actor will select ‘yes’ when the system asks them if they want to continue.  4.The tester will check if the flow has been terminated and that the blank has no longer been recorded. |
| Test record: |
| Date: |
| Tester: |
| Result: |
| Date: |
| Tester: |
| Result: |

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| --- |
| Use case ID:TM02 |
| Use case name: ProduceBlankReport |
| Test number:2 |
| Objective: To test the main flow |
| Set up:  The tester will login and select ‘produceBlankReport”. |
| Expected results:  1.The system displays the contents of the report on the screen  2.The tester would be able to choose from the options: “used blanks”, “turnout” and “monthly turnover”. |
| Test:  1.The tester will click on “Create a blank report”.  2.The tester will check whether a window opens, prompting the tester to choose the options: “Used blanks”, “turnover “and “monthly turnover”.  3.The tester will select one of these options.  4.The tester will check whether the system displays the data on the screen. |
| Test record: |
| Date: |
| Tester: |
| Result: |
| Date: |
| Tester: |
| Result: |

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| --- |
| Use case ID:TM02.1 |
| Use case name:noBlankUsed |
| Test number:2.1 |
| Objective: Test the alternative flow where there have been no used blanks. |
| Set up: The tester will log on and click on the “create a blank report”. |
| Expected results:  1.Message stating that there are “No blanks used”.  2.The system returns to the main dashboard |
| Test:  1.The tester clicks on create reports  2.The tester will check to see if the system states that a report on the number of blanks cannot be produced as there are no blanks being used. |
| Test record: |
| Date: |
| Tester: |
| Result: |
| Date: |
| Tester: |
| Result: |

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| Use case ID:TM03 |
| Use case name: createSalesReport |
| Test number:3 |
| Objective: Test the main flow |
| Set up: The tester logs in to the system and clicks on createSalesReport |
| Expected results:  1.The system displays the options: “create individual report” and” Create summary”.  2.System displays:  Create reports per advisor.  Create reports per USD rate.  Display sub total.  Display grand total. |
| Test:  1.The tester clicks: “Create sales report”  2.The tester clicks “Create summary”.  3.The tester clicks “Create individual report: |
| Test record: |
| Date: |
| Tester: |
| Result: |
| Date: |
| Tester: |
| Result: |

|  |
| --- |
| Use case ID:TM04 |
| Use case name:payLater |
| Test number:4 |
| Objective: Test the main flow. |
| Set up: The tester is logged in |
| Expected results:  1.Tester selects “pay later” or “decline”.  2.If the payment is not received within thirty days, the system should output a notification to the tester, stating this. |
| Test:  1.The tester will choose if the client wants to pay thirty days later.  2.The tester will accept the “paylater” request.  3.If the payment is not logged within the database within 30 days, then the notification will be sent. |
| Test record: |
| Date: |
| Tester: |
| Result: |
| Date: |
| Tester: |
| Result: |

**Unit testing:**

**Documentation**

**Technical documentation:**

**User documentation:**