Software Engineering Lab
Implementation Report II - Build II

ASCEND-The Trip Advising Software

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1. Basic Information

Ascend-The Trip Advising Software presents a flight booking interface where customers can search flights based on travel preferences and book flights. Moreover, customers are granted the privilege to choose their preferred seats from the flight seat matrix and the software issues a corresponding boarding pass to the customers.

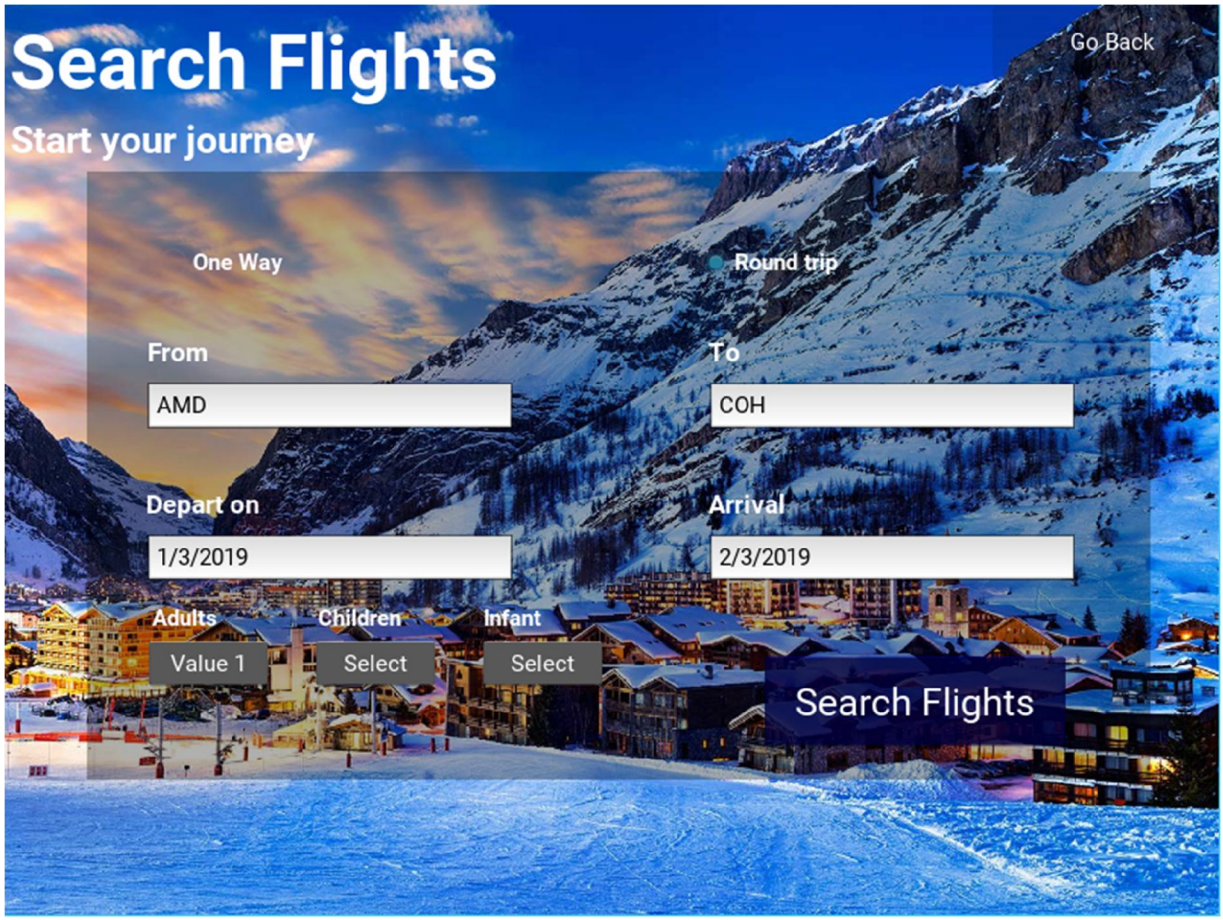
The purpose of this document is to elaborate on the functional requirements that were not implemented in the previous build. The functional requirements namely FR-07 and FR-14 was planned to be implemented in the final incremental build thus satisfying all the functional and non-functional requirements as per the Software Specification Requirements document.

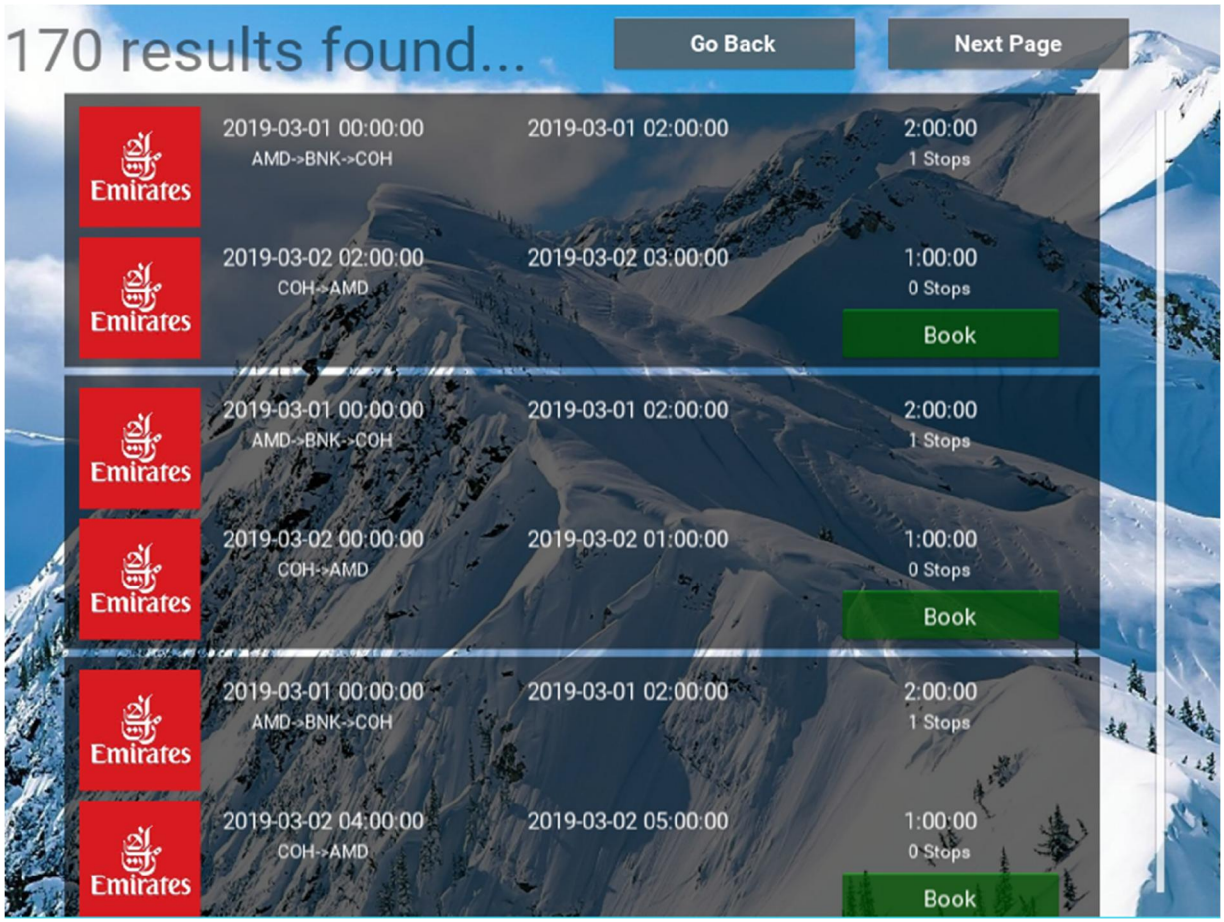
2. Pending / New Functional Requirements (Implemented)

FRID	NAME	Type (Pending OR New)	Description
FR-07	Search round trip flights .	The application shall allow the user to search the round trip sequence of flights to be taken from the entered source to destination and back from destination to source in the scheduled departure and arrival dates respectively.	The Software is based on incremental model. The first increment focusses on delivery of the core product which is fully functional and server one-way flight searched to the customers. Feedback on this first core increment is considered imperative to build and integrate the next increment which will include round trip flights.
FR-14	Email generation	The application shall generate an email to account of the customer who booked the flight once the boarding pass has been issued.	Functional Requirement FR-14 was planned to be launched as a final increment to the software product which completes the software product design and development cycle.

4. Screenshots of Functional Requirements Implemented in this Build

4.1. FR-07: Search Round Trips




170 results found...
Go Back
Next Page
Emirates
2019-03-01 00:00:00
AMD->BNK->COH
2019-03-01 02:00:00
2:00:00
1 Stops
Emirates
2019-03-02 02:00:00
COH->AMD
2019-03-02 03:00:00
1:00:00
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Book
Emirates
2019-03-01 00:00:00
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2019-03-01 00:00:00
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COH->AMD
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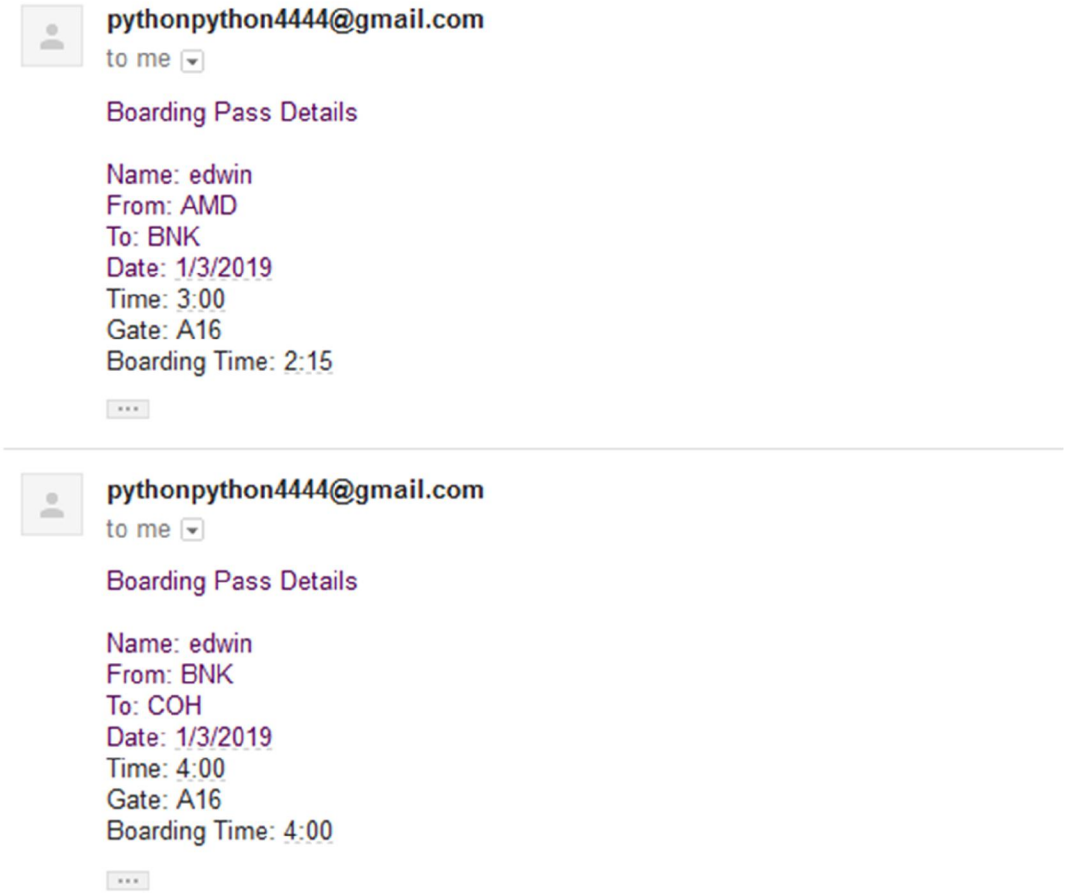
Book

4.1. FR-14: Email Generation



pythonpython4444@gmail.com
to me

Boarding Pass Details

Name: edwin
From: AMD
To: BNK
Date: 1/3/2019
Time: 3:00
Gate: A16
Boarding Time: 2:15

pythonpython4444@gmail.com
to me

Boarding Pass Details

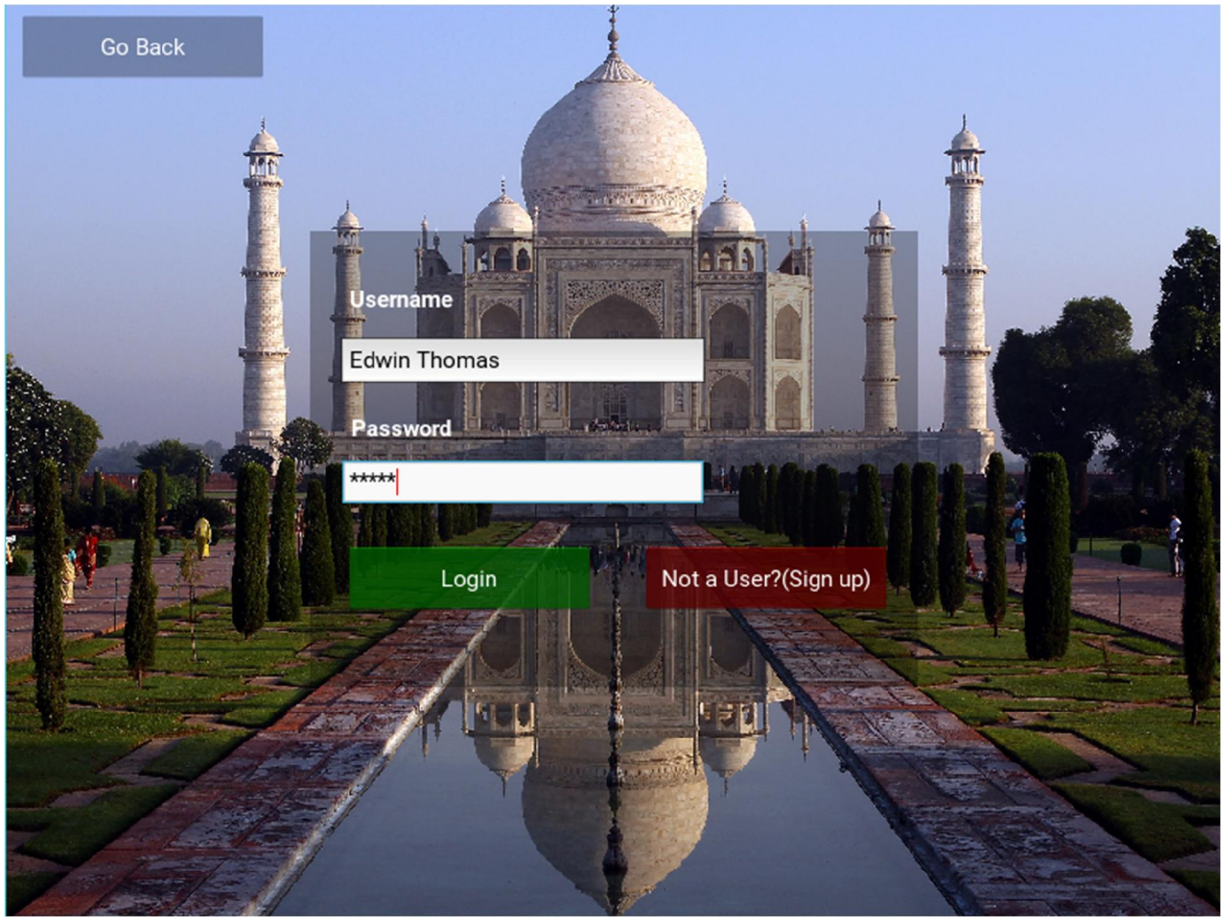
Name: edwin
From: BNK
To: COH
Date: 1/3/2019
Time: 4:00
Gate: A16
Boarding Time: 4:00

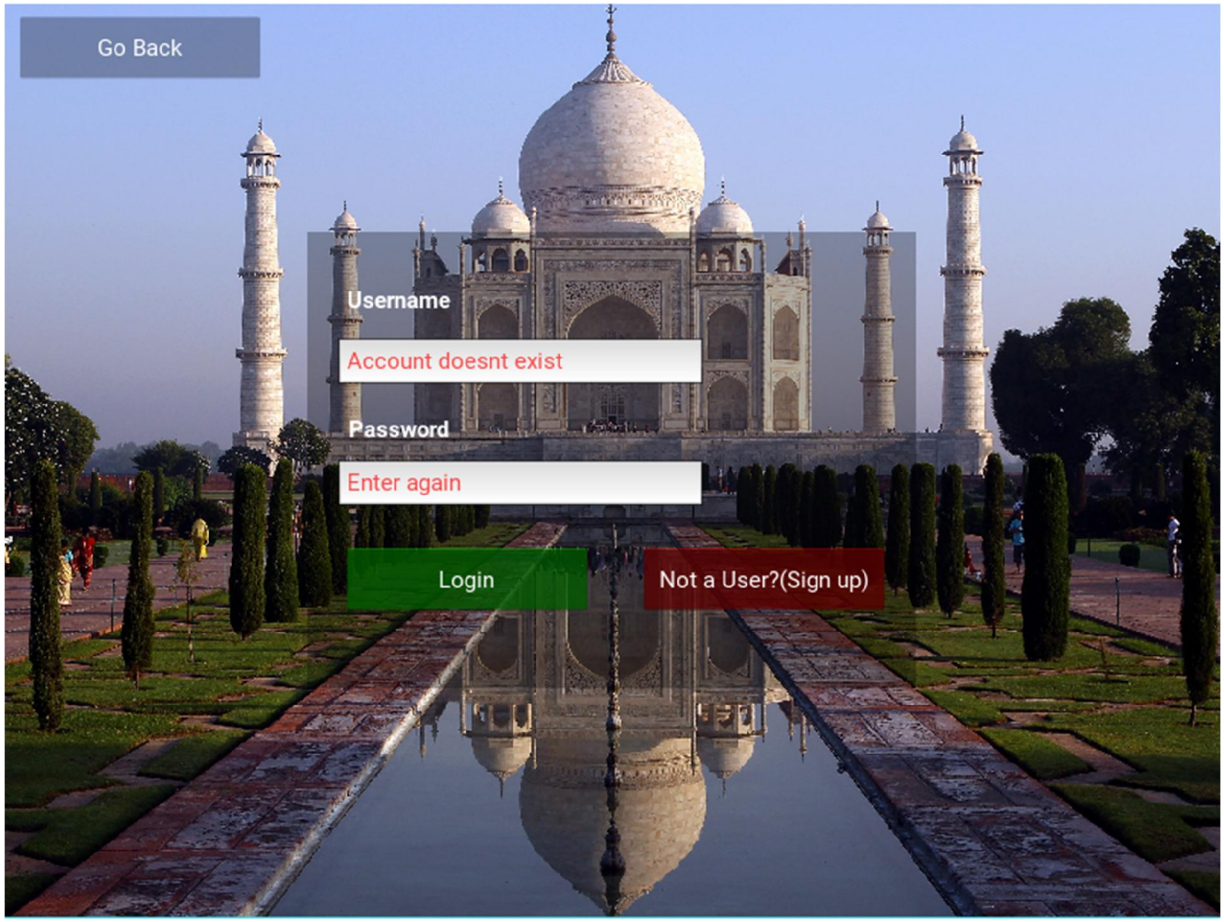
5. Non-functional Requirements Considered

NFRID	NAME	Description
NFR-01	Response Time	The swiftness with which the software generates email to customer. The email generation to the customer should take no more than 5 seconds.
NFR-02	Response Time	The swiftness with which the software displays the search results to customer. The search results should take no more than seconds of response time to be displayed to the customer.
NFR-06	Customer Login Account Security	The security of the personal account of the customer/user. If the customer attempts to login with a non-registered account then the system must not allow access and the customer will be notified about the failure to login.
NFR-07	Application testability	The application should be built and developed such that it is easy to test and debug different modules of the system where each module corresponds to a particular function.
NFR-08	Application portability	The application must be portable with windows and Linux operating systems. This makes the software more adaptable and makes it more platform independent.

6. Screenshots of Non-Functional Requirements

6.1. NFR-06: Customer Login Account Security.





7. Summary of Test Plan

- **Functional Requirements** that will be tested in the testing phase FR-01, FR-02, FR-03, FR-04, FR-06, FR-09, FR-10, FR-11, FR-12, FR-13, FR-07, FR-14. All the functional requirement as per the Software Requirements document will be tested and ensured to be bug free prior to deployment.
- **Non-Functional Requirements** that will be tested are NFR-01, NFR-02, NFR-06. The remaining functional requirements cannot be tested as they are not pertaining to the design/coding phase of the software development project.
- Pytest can be used for the purpose of testing small modules in the program. Moreover, the development team will also try out maximum number of test cases as input to ensure proper functioning of the code before deployment.

8. Summary

This report describes the details pertaining to the second or final build of the software ASCEND. The first section in the document briefly describes the functional and non-functional requirements that are implemented in the latest build. The next section describes in tabular form detailed descriptions of the requirements incorporated into the latest built as per the SRS document for the software. All functional and non-functional requirements have been successfully completed in this increment. The next section displays screen shots of the implementation of added functional and non-functional requirements. The final section briefly discusses the plans for the testing phase of the software project ASCEND to be implemented by the development team.