# ASSESSMENT 1 (12 marks)

# *(1000-1500 words)*

# Team Report

## {{Team Name}}

*A report is of great importance in a business. As software engineers we need to use reports to model high level technical specifications and design aspects of the software solution so stakeholders can understand how the software will be developed and what is required.*

## Stakeholder Analysis –1

|  |  |  |  |
| --- | --- | --- | --- |
| Stakeholder | Interest | Estimated Project Impact | Estimated Priority |
| Owner | Increase profits margin  Integration for future expansion  Better Accessibility | MED  HIGH  HIGH | 1 |
| Team Members | New tool to work with  Simplified booking process | LOW  HIGH | 2 |
| Customers | Ease of Access | LOW | 3 |

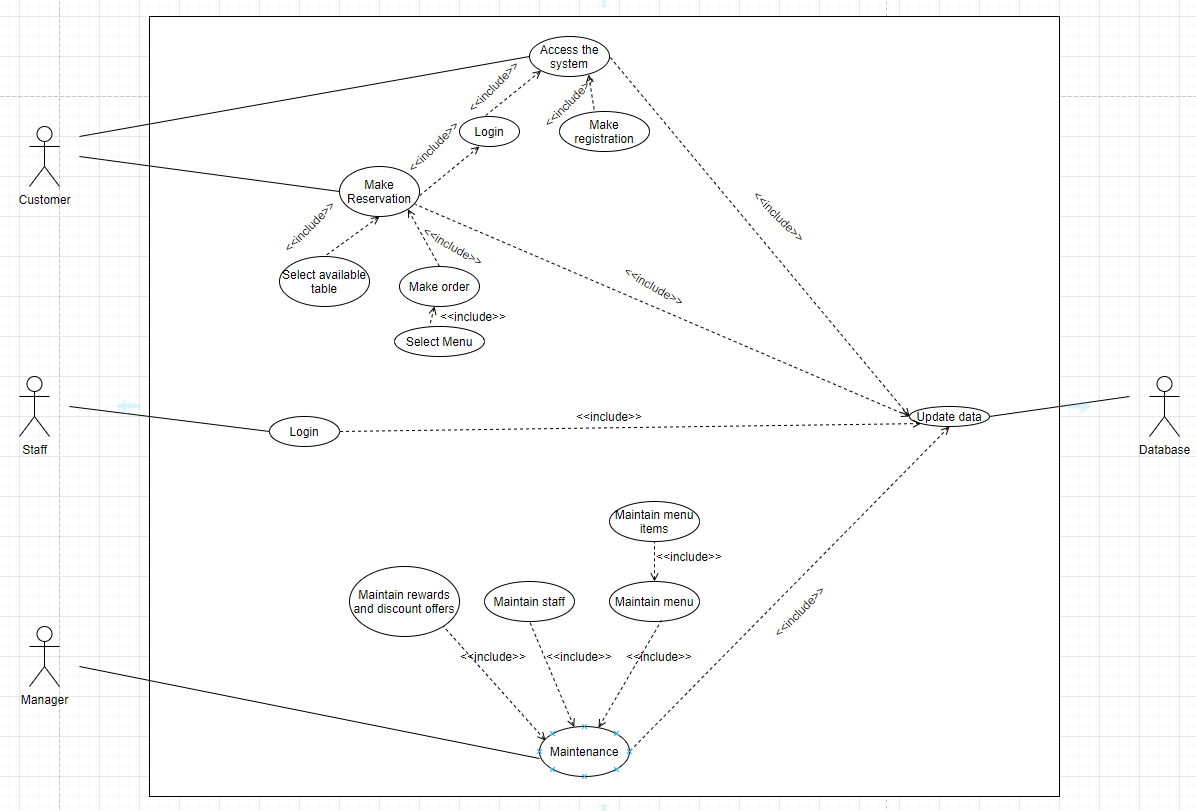
## Release Backlog - Andie

## Calendar Description automatically generatedRelease & Iteration Plan - Andie

Graphical user interface, text, application

Description automatically generated

**Use Case Model - Zhihao Xing**



**Non-Functional Requirements (NRF’s)  - Zhihao Xing**

There are requirements that are not functional in nature. Specifically, these are the constraints the system must work within.

**Compatibility**

* The program and website should be compatibility with all major browsers and operation systems such as Windows, IOS and Android.

**User Interface**

* The UI should be designed user friendly and need to consider the color blindness users.

**Security**

* Access should be controlled with account name and password.
* Only staffs can access the staff mode and other customer users cannot.
* Database should be secured, and loss of information should be prevented.

**Performance**

* The system should be up and running 24/7.
* The system should support at least 100 users using the online booking concurrently without any lag.

**Backup and Recovery**

* Backup is needed to prevent loss of data and database are down。

**System Maintenance**

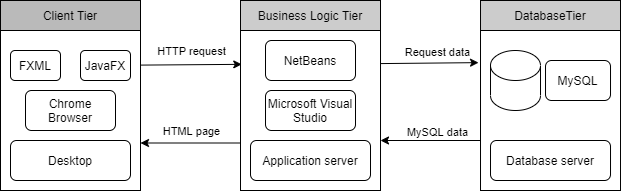
* System maintenance should be conducted base on regular interval.
* It should be conducted on off-peak time.

## Use Case Narratives (Iteration 1 / Sprint 1 only) - Ahmad

Use case narratives describe the process steps inside each use case. For each use case you will need

* A number and name that identify the use case. These are often assigned according to the organization’s standards, templates, and/or requirements processes.
* The pre-and post-conditions describe the scope of each use case. Since each use case begins and ends, we need to tell it where to begin and when to end.
* A matrix with what the actor does and how the system responds to each actor request. (scenario of each use case)
* Primary, alternate, and exception flows.

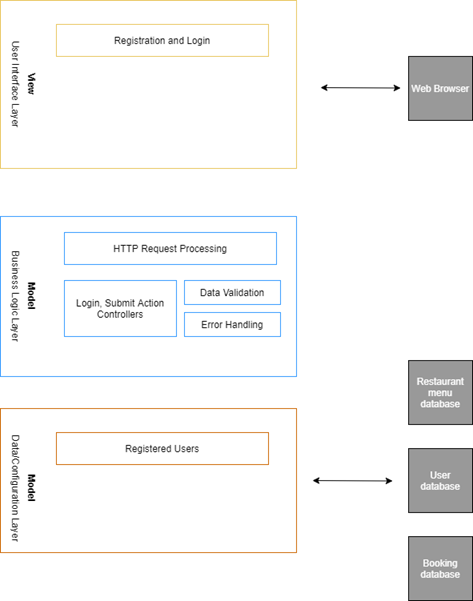
## Architecture Solution Options & Evaluation -2



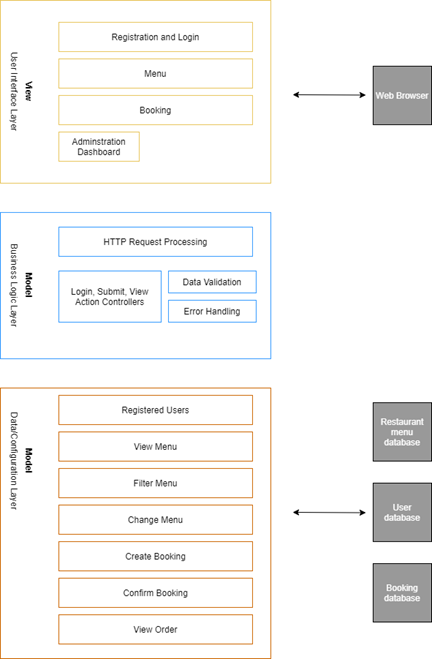
When considering an appropriate solution for the user interface (client tier), the software development teams skills and experience was a significant factor as it would greatly impact the quality of the system interface presented to customers. Thus, rather than using a language such as HTML which the development team has limited experience for, FXML (and its programming platform, JavaFX) was selected due to the proficiency the developers had with that language. Similarly, Netbeans was chosen as the programming environment due to its capacity to run FXML (unlike other Java environments such as BlueJ), as well as the development team’s knowledge and experience using the environment application. Netbeans was also selected due to its ability to synchronize with GitHub, which allows developers to efficiently access and share each other’s files during the project. For the database of the system, MySQL was chosen as it is a high performance, easy to use database management system that is also compatible with a variety of operating systems (such as windows, macOS and linux).

## Architecture Solution Model Diagram –1

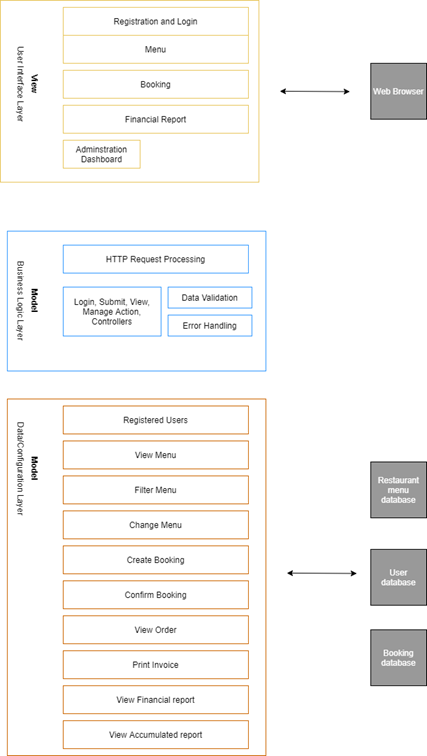
**Iteration 1**



**Release 1**



**Project 1**



## Technology Stack, Proposed Solution -1 - Ahmad

A technology stack, also called a solutions stack, technology infrastructure, or a data ecosystem, is a list of all the technology services used to build and run one single application. For example you may have used something like or planned to use NodeJs with MongoDB with npm and other technology services to help you build your application.

## Contribution Table

|  |  |
| --- | --- |
| **Student Number** | **Completed Tasks** |
| 13623905, Andie | Release Backlog, Release & Iteration, Stakeholder Analysis |
| 13924624, Chamod | Architecture Solution Options & Evaluation, Architecture Solution Model Diagram |
| 13421565, Zhihao | Use Case Model, Non-Functional Requirements |
| 14158226, Ahmad | Use Case Narratives, Technology Stack, Proposed Solution |
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