**Development of FlyAway Booking Web Application**

Developer: Newton Bujiku – bujikun@vodacom.co.tz

**GIT URL :**

The progress of the project is hosted at github repository below:

<https://github.com/bujikun/java-fsd-newtonbujiku-bujikun-vodacom.co.tz>

Under the Phase 2 directory

**SPECIFICATION**

This is Jakarta EE web application through which a user can make a booking for a flight. Admin manages the backend doing this like adding airlines and flights.

**TECHNOLOGIES & CONCEPTS**

This application uses the following concepts and technologies

* Java 17
* Hibernate 6
* Jakarta EE 10
* Tomcat Application Server 10
* Lombok
* Bootstrap 5
* Jquery
* MySQL
* Maven
* IntelliJ Idea
* Git & Github
* Agile Scrum Framework

For Java concepts in the project: The application requires JDK 17 & Tomcat 10

It uses concepts such as Servlet API, SQL etc.

**PROJECT IMPLEMENTATION**

The project was completed in 2 sprints:

**Sprint 1**

The following were achieved in this designing sprint:

* Determining Java concepts to be used
* Choosing database technology and build tools
* Defining project scope and structure
* Preparing remote repository
* Sprint planning and review

**Sprint 2**

The following were done in this sprint including scrum ceremonies and user stories:

* Sprint Planning
* Passenger ability to search available flights depending on date and source and destination
* Passenger ability to view available flights depending on search parameters
* Passenger ability to register for a flight
* Ability to make payment via a payment getway
* Ability to view booking details after making payment
* User can search for booking details by using booking number
* Admin can login into the admin portal
* All admin functions via url paths are restricted to authenticated users
* Admin can view and add airlines
* Admin can view and add places
* Admin can view and add flights
* Admin can view passengers
* Admin can view passenger bookings
* Admin can change password

**How run the program.**

1. Download Tomcat 10
2. Open the project in Intelli J/Eclipse
3. Deploy the application in the Tomcat server
4. Open the browser with the context URL

**The screenshot.pdf** file has all the screenshots depicting the execution of the application step by step.