# DBMS AND SDA PROJECT PROPOSAL

## Members

* *Muhammad Moaaz bin Sajjad (20K-0154)*
* *Saad bin Khalid (20K-0161)*

## Abstract

We aim to implement an airline reservation system where the company can post details about its flights, and the users can search for flights as per their needs and then book one.

## Features

1. Admin portal for airline company.
2. Authentication (including via Facebook and Google).
3. Customers can search for flights and then book one.
4. Customers must specify the start location and the destination.
5. They can further filter by days, timings, cost, and class (business or economy).
6. The flights will be displayed from most recent to least.
7. After booking, a payment page will appear.
8. After payment, ticket(s) will be generated for printing.
9. The customers can share ticket(s) on social media such as WhatsApp.
10. After the flight, customers can give rating out of 5 and also leave a comment.
11. Airline company will enter various data such as number of flights and for each, its timings, starting location and destination, number of seats in business and economy, and cost of business and economy ticket.
12. For each flight, the airline company will be able to view how many business and economy seats have been booked.
13. They can postpone flights.
14. They can cancel flights.
15. In case of any postponement or cancellation, a notification will be sent to customers.
16. In case of cancellation, the customers will also be refunded.
17. A notification will also be sent to users 3 hours before the flight.
18. Customers can view most popular destinations.
19. A profile page which will display customer's information as well as his or her flight history.
20. Ability to use the app in light or dark mode.
21. Airline company can offer discount coupons.
22. Customers will be warned if they try to book flights with overlapping timings.

## Tools and Technologies

We will use Flutter for frontend, SupaBase for backend and PostgreSQL for backend.