Assignment 1

# Task 1

Diagram, shape

Description automatically generated

# Task 2

## Use Case 1: Flight Reservation

### Actor: Passenger

A customer reserves a place on a flight and pays for a ticket. The customer is assigned a random seat. On the day of the flight, they board the flight. And once they reach their destination, they disembark.

### Variant 1:

A customer reserves a place on a flight and pays for a ticket. The customer books a specific seat if available. On the day of the flight, they board the flight. And once they reach their destination, they disembark.

### Variant 2:

A customer reserves a place on a flight and pays for a ticket. The customer books a specific seat if available. The customer finds that the flight date isn’t suitable and cancels.

### Variant 3:

A customer reserves a place on a flight and pays for a ticket. The customer finds that the flight date isn’t suitable and cancels.

## Use Case 2: Pilot Employment

### Actor: Flight Staff

Flight staff hire a pilot that has the appropriate credentials. The flight staff retires the pilot.

### Variant 1:

Flight staff hire a pilot. The flight staff fires the pilot.

# Task 3

Diagram, schematic

Description automatically generated

# Task 4

## Pre-conditions for Use Case 1

Before a passenger can board a flight, they must have a flight ticket.

The flight must reach it’s destination before the passenger can disembark.

## Post- conditions for Use Case 1

Flights can only be cancelled after reserving and purchasing a flight ticket.

After a passenger purchased a flight ticket, they can book a specific seat.

## Pre-conditions for Use Case 2

Before staff can hire a pilot, the pilot must have the appropriate credentials.

## Post- conditions for Use Case 2

After the flight staff find’s the pilot’s work satisfactory, they may retire the pilot after an extended period of time.

After the flight staff find’s the pilot’s work unsatisfactory. They may fire the pilot and let him go.