ISLAMIC UNIVERSITY OF TECHNOLOGY

Airline Ticket Management System

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Declaration of Authorship

We, Author list goes here, declare that this thesis titled, 'Gaming Insight: Conversion of Popular Sedentary Games into Motion-Based Form' and the work presented in it are our own. We confirm that:

- This work was done wholly or mainly while in candidature for a research degree at this University.
- Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated.
- Where I have consulted the published work of others, this is always clearly attributed.

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Contents

Airline Ticket Management System

Project Objective:

The main goal of our project is to collaborate the processes of the air ticket reservation, cancelation and various BnB service of different air transportation services via our website. This project will have an efficient distributed system that can be easily accessed by the customer. It will put much emphasis on achieving customer satisfaction by providing a user-friendly website for ticket booking and various BnB services.
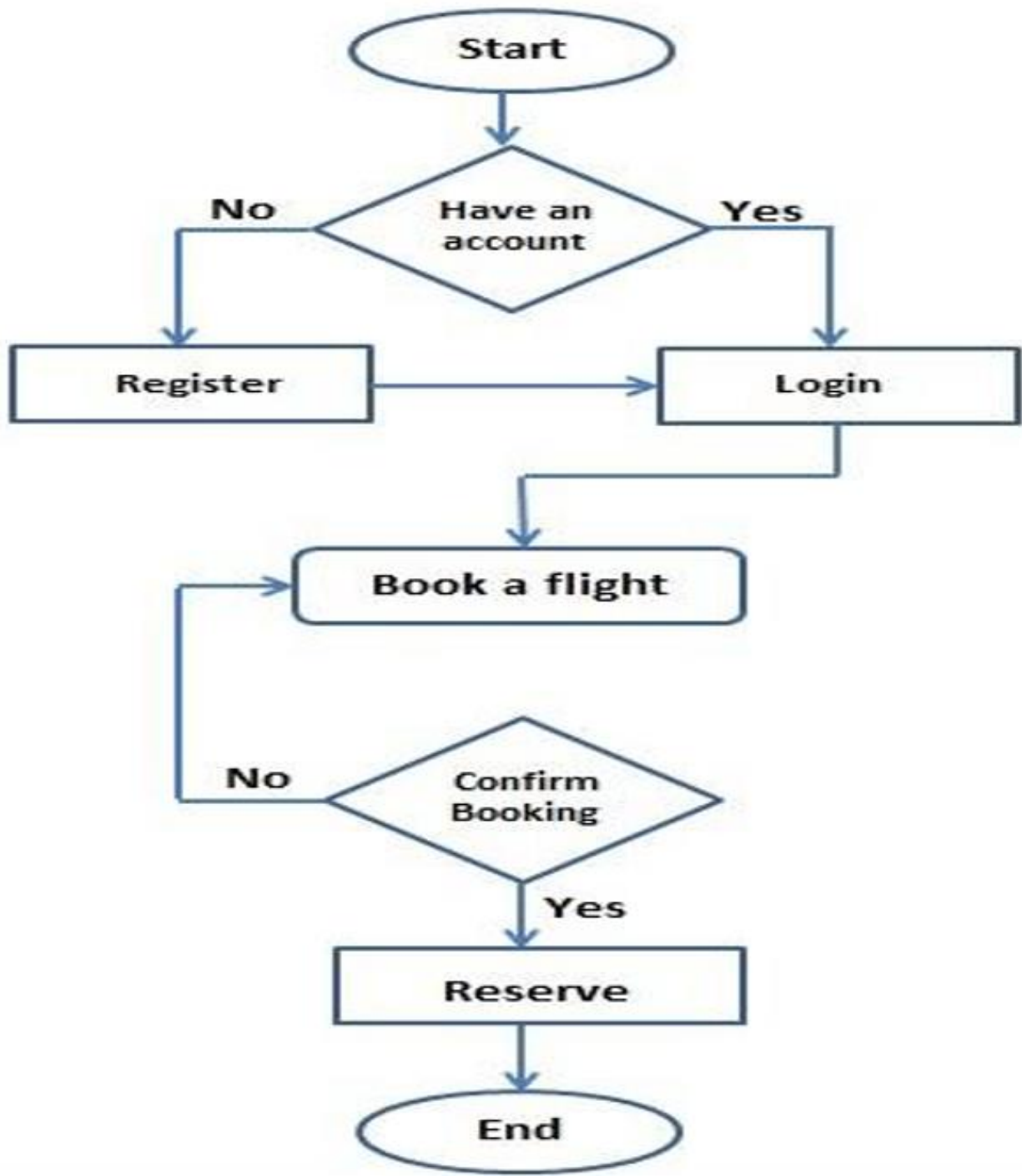
Project Overview:

This project is an integration of air ticket booking and BnB services. Airline tickets of multiple airline companies will be available in this website. For instance, US-Bangla Airlines, Biman Bangladesh Airlines, NovoAir, SkyAir, United Airways, Regent Airways etc. This airline services will be used for both domestic and international flights. A customer at first must complete registration in order to use the facilities of this website. Upon

completion the customer now can book flights, reserve tickets, cancel tickets, use BnB services and so on. BnB service refers to the term "Bed and Breakfast". It means that if a customer wants to stay in the airport for a few hours before departing to its desired location then he/she can rent rooms provided by the BnB services. Thus, this website will have BnB services which will provide accommodations and breakfast facilities to its user. Again, a customer can only use the BnB service without booking tickets. That is, say a customer has booked tickets from the airport but doesn't have any BnB services. So, by using this website it can ensure BnB services without the hassle of waiting in the airport for a long amount of time.

On the other hand, BnB services can be threefold namely,

1. Premium
2. Business
3. Ordinary.

As the name suggests premium and business services will provide a luxurious ambience but will be much costly in comparison to the ordinary services. Therefore, customers will have a wide range of options for selecting their BnB service.

Project Modules:

This software has three main modules. They are:

1. Admin
2. Executives
   a. Airline Executive
   b. BnB Executive
3. Customers

- Admin**:** Admin is the totalitarian of this entire system. It controls the overall functionality and flow of the system. An admin can add members, remove members, add extra admins, remove them, add executives, and remove executives. An admin can remove various members according to the contract length or for any sort of contract breach. It can check total ticket sales, expenditure, cancel bookings and invigorate various changes in the system. An admin can see various flights and administer various changes as necessary. Therefore, it can be said that the admin is the owner and controller of the system.

➢ Adding and Removing Members: Admins have the authority to add and remove members as per as the contract length and protocols following strict rules and regulations of the system.

➢ Adding and Removing Executives: Admins also hold the power of adding and removing executives of the whole system who are responsible for running the entire operation.

➢ Adding and Removing Admins: The admins can decide amongst themselves in important meetings or daily scrum to add or remove any admins as per as the given policies or protocols of the system. This plays a very important role in managing the entire system.

➢ Checking total sales: Admins can check the total sales of the flights and keep a balance sheet of the total revenue and expenditure of the system. This plays a vital role of maintaining the in-flow and out-flows of resources for the entire system.

➢ Displaying flights and bookings: Admin can check the flight's departure time, arrival time or cancel any bookings and bring on various changes in the system as per as the protocols and policies of the system.

➢ Remove bookings: Admin holds the power to cancel bookings and change the schedule as per as the given policies and following strict protocols.
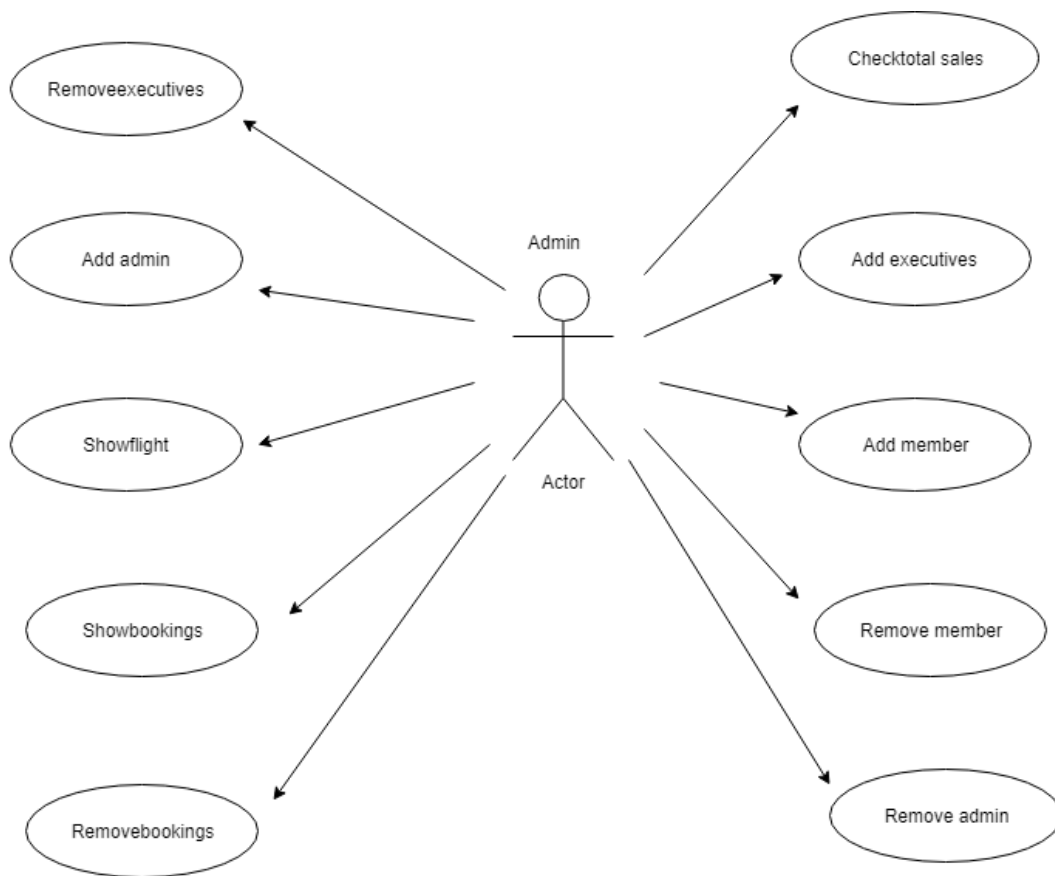
Fig: Use Case-Diagram for Admin

- Executives: Executives on the other hand are twofold. There is an airline executive as well as a BnB executive. An airline executive is responsible for providing tickets to the website. They are from different airline companies. They are responsible for finding available tickets to of various destinations and providing them to the website. The admin is then responsible for adding these available tickets to the website.

  The BnB executives are responsible for providing different accommodation services for this project. They find available spaces, rooms and food for the customers to use and provide them to the website. Management of these accommodation services requires a lot of effort and is the vital part of this project. Thus, BnB executives should be professional and skilled and maintain administration efficiently.

  The executives in duty are very skilled and have to look after the whole process of ticket booking, reservation and cancellation very minutely in order to maintain the utmost flow and efficiency of the whole system. Any failure in these procedures will eventually lead to the failure of the whole system thus creating havoc. Therefore, the significance of executives in maintain the whole operations is very vital for the system.

➢ <u>Airline Executives</u>:

✓ Provides tickets to the website.
✓ Belongs to different Airline companies.
✓ Manages the pricing of the tickets.
✓ Expertise in business management.
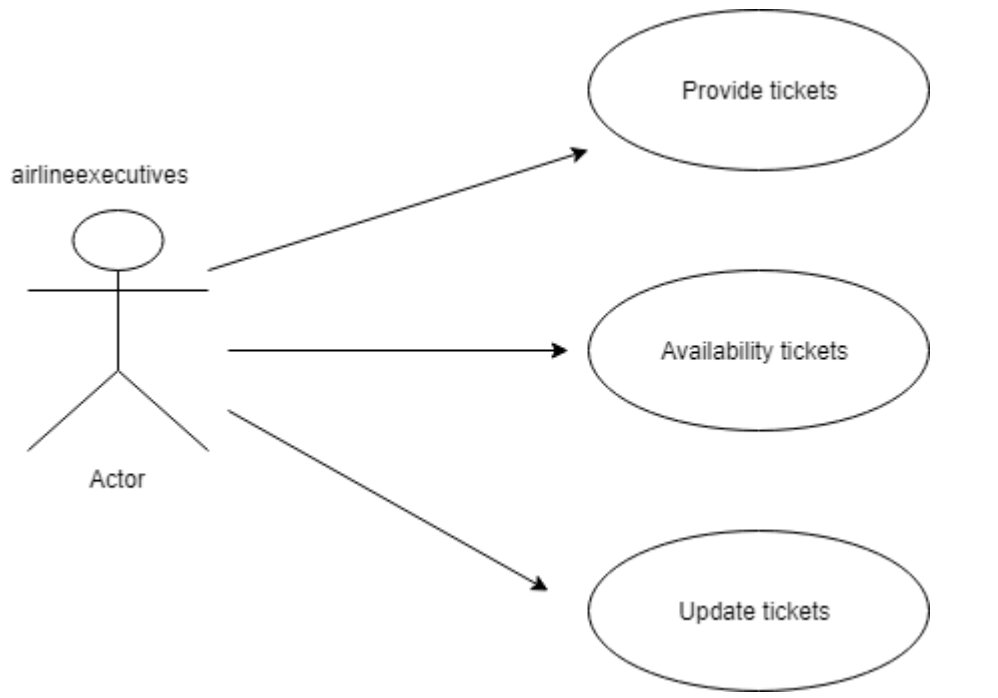✓ Vast knowledge of day to day airline services.
✓ Skilled and proficient.

Provide tickets

airlineexecutives

Actor

Availability tickets

Update tickets

Fig: Use-Case Diagram for Airline Executives.

➢ <u>BnB Executives</u>:

✓ Provides accommodation services.
✓ Finds available spaces and rooms.
✓ Manages food for the customers.
✓ Extremely skilled and proficient.
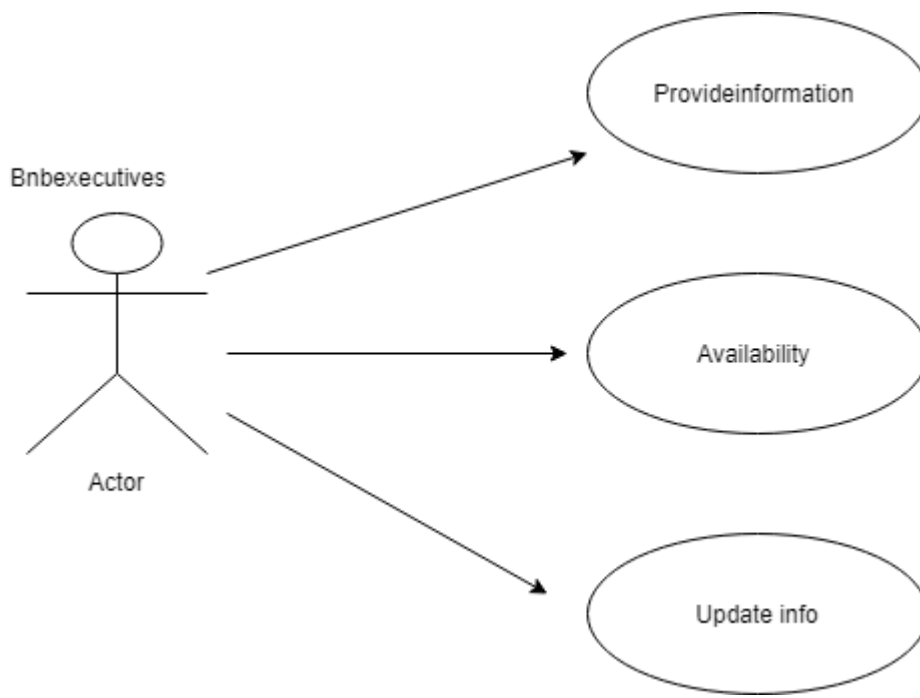✓ Has to have leadership skills.

Fig: Use-Case Diagram for BnB Executives.

➢ Customers: Customers or users access the website. But they need to be registered beforehand. For completing registration, they need to enter their credentials and get verified. Upon completion the user can now get logged in the system anytime they want. The customers can book flights, reserve tickets, cancel tickets, use BnB services and use the overall facilities of the system. Customers are required to follow the required policies.

➢ Sign-up: A customer needs to sign up before using the website. Without registering the customer can't book tickets or get any BnB services. For signing up the customer needs to provide

➢ Log-in: After signing up the client can now log-in to the website and book tickets as per as their wish.

➢ Booking tickets: The customer can now book flights by giving the flight name, destination and duration of the flight. After booking the customer can pay through various methods.

➢ <u>Payment Method:</u>

The payment methods for booking flights and BnB services are:

1. Mastercard
2. Visa
3. Paypal
4. Bkash
5. Rocket
6. Upay

For Mastercard, visa and PayPal payment methods the customer needs to enter their Credit Card information and credentials. After the credit card number and information is validated and verified, authorization of the Mastercard or visa network is required. This completes the transaction procedure for the customer. In case of Bkash, Rocket or Upay there will be a dedicated phone number where the users can send money for buying tickets. This procedure is under the control of admin. After the money has been sent the system will sent a message to the user ascertaining that the transaction is successful. An e-mail will be sent to the user containing files of the image of tickets bought. The customer after showing this email to the airport officials will receive the tickets to the specific destination.
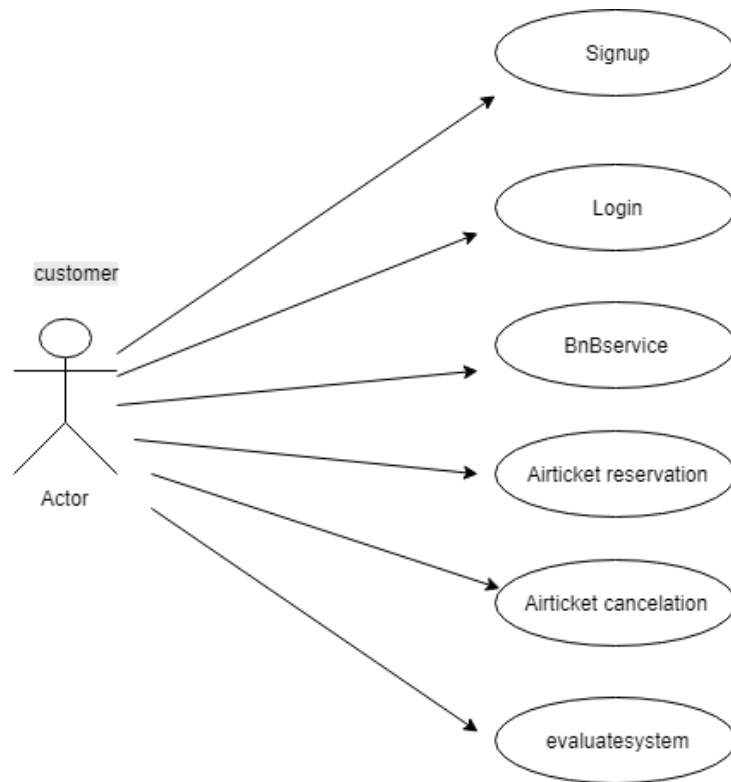
Fig: Use Case-Diagram for Customers.

Why this?

This website has many features which offers various assistance to the customers. They are:

1. Not many websites offer the dual services of booking ticket online along with providing BnB services.
2. This feature makes this website unique and much more efficient than other ticket booking websites and BnB services.

3. A customer can book tickets to various destination by comparing the price range of different airline companies and BnB services. This allows the user flexibility in case of booking tickets.
4. This website is easy to use, user friendly, simple, flexible and provides best experience for the customer.
5. This website aims for total customer satisfaction.