REQUIREMENT FOR AIRPORT WEBSITE DEVELOPMENT

UX Design Requirements

The service provider is required to design the website in line with the requirements identified by BAC based on their stakeholder's survey. The requirement for the website will include but not be limited to the following:

   i.   Study and review the requirements identified by client and advise if further improvements can be made;

   ii.   Create two (2) portals i.e. for Passenger/Guest and for Corporate as per the tentative sitemap given below:

        a.   Site Map for Passenger/Guest Portal

Home Page : Passenger Portal

Tab1: Find your Flight	Tab 2: Before You Fly	Tab3: At the Airport	Tab4: When ...
•Arrivals	•To/From the airport	•Interactive Airport Map	•Sites of Interest
•Departures	•Car park	•Meet & Greet Services	•Dining
•Airline Directory	•Long term parking	•Restaurants - Dining	•Shopping
•Flight Tracker	•Short term parking	•Shopping	•Hotels
	•Shuttle services	•All shops	•Events
	•Taxi	•Exchange Bureau	
	•Grab a taxi	•Banks & ATM	
	•Pre-book a taxi	•Lounges	
	•Public Transport	•........ Lounge	
	•Bus Routes & Timings	•........ Lounge	
	•Car rentals	•........ Lounge	
	•Immigration	•........ Lounge	
	•Customs	•Services	
	•Visa	•eGate	
	•Security	•Self-Check-in Services	
	•F1 Regulations	•Prayer Rooms	
	•Baggage	•Medical Services	
	•Baggage regulations	•Services for Passengers with Disability	
	•Baggage drop	•Cellular carriers	
	•Baggage claim	•Smoking Areas	
	•Baggage lost	•Emergency Number	

b. Site Map for Corporate Portal

Home Page: Corporate Portal			
Tab1: About Us •Who we are •Biographies	**Tab 2: Airline Development**	**Tab3: Business Opportunities** •Advertising •Property •Retail •Tender Listing	**Tab4: Media Centres** •Press Releases •Photo & Video Gallery •Publications • •Contact Us

Website Footer:
Careers   Sitemap   Contact Us

iii.   The website should be bilingual;

iv.   The service provider needs to suggest appropriate visual materials (images / videos) that needs to be uploaded in the website;

v.   The service provider also needs to design the website to run appropriately on any mobile browser;

vi.   The service provider needs to follow the client guidelines while designing of the

website.

Technical Requirements

The service provider will have to adhere to the following technical requirements. The list is indicative and new requirements may be added based on suggestions from the service provider or as arising out of the requirements from the website:

i.   Client shall be able to edit website (CMS based) to update and maintain website frequently from an admin portal.

ii.   Integrate Social Media to be redirected through the website

iii.   Design and development to be in lined periodically (delivered on time)

iv.   Execute website to highest standards in accordance with all relevant safety procedures and codes of practice

v.   Provide support during emergencies or failure of system to ensure quality control and system readiness constantly

vi.   Web API Layer.

Hosting Requirements

The service provider will have to adhere to the following hosting requirements:

i. The service provider will use Client AWS account to host the system.

ii. The service provider will be responsible for setting up the hosting architecture and performing the necessary configuration to host the system on AWS cloud.

iii. Client will give the Service provider access to the website and the AWS components which are used to host the website, while the Service Provider will be fully responsible for supporting and maintaining the website and any AWS components used to host the website during the Support and Maintenance.

iv. The service provider will need to provide budgetary estimates for hosting the system for his proposed hosting architecture.

Chat Bot Requirements

The service provider will have the option to include chat bot requirements. The requirements should be evaluated and priced separately by the service provider, so that business owner can have the option to exclude it from the project requirements if they wish.

Compliance Matrix

The table below shows the mandatory/optional items regarding the project requirements:

Item	Status
Website	
UX Design Requirement	Required
Technical Requirement	Required
Hosting Requirements	Required
Chat Bot Requirements	Optional

Important Note: Optional requirements should be evaluated and priced separately by the service provider, so that business owner can have the option to exclude it from the project requirements if they wish.

Mobile Application

Technical Requirements

Client intends to develop a mobile app for the airport. The service provider is required to advise on the look and feel as well as design for the app in line with Client's guidelines and requirements... The scope will include but not be limited to following task:

   i.   Design mobile app in line with Client's guidelines and requirements;

   ii.   Define the look and feel of the app;

   iii. Define the content of the app;

Compliance Matrix

The table below shows the mandatory/optional items regarding the project requirements:

Item	Status
Mobile Application	
Client Guideline Requirements	Required
UX Design Requirements	Required
Content Requirements	Required

The purpose of this project is to develop a new website for the airport to replace the existing one.

Currently client is in the process of airport modernization, and needs to reflect this modernization on the World Wide Web. The new website will have a new look and feel, as well as, add new features in addition to the ones in the existing website.
The new website is required to feature a guest portal which groups all information and functions relevant to guest visitors, a corporate portal which groups all information and functions relevant to corporate visitors, and an admin portal which manages the content of the website.

Functional Requirements / Product Scope

Mandatory requirements

1. Viewing Promos & Offers
   a. As a passenger, I want to view airport promos and offers, so that I can know about the latest promos and offers.
2. Finding Flight
   a. As a passenger, I want to be presented with a flights timetable on the home page, so that I can view latest flights information.
   b. As a passenger, I want to subscribe to receive flight notifications, so that I can be reminded about my flight.
   c. As a passenger, I want to see a list of departure flights, so that I can view Page **5** of

detailed information about my flight.

    d. As a passenger, I want to see a list of arrival flights, so that I can view detailed information about my flight.

    e. As a passenger, I want to see the airlines operating in the airport, so that I can easily navigate to the airline website.

    f. As a passenger, I want to be presented with a live flight tracking map, so that I can get real-time status and movement details of my flight.

3. Viewing Announcements

    a. As a passenger, I want to be presented with airport announcements in a highly visible place in the passenger portal on the home page, so that I do not miss out on important information.

4. Browsing Transport Info & Services

    a. As a passenger, I want to view details about long term parking, so that I can be aware of its location and read important information about it.

    b. As a passenger, I want to view details about short term parking, so that I can be aware of its location and read important information about it

    c. As a passenger, I want to view information about shuttle services, so that I can be aware of their schedules, stops, duration and important details.

    d. As a passenger, I want to view information about grabbing taxi services, so that I can hire a taxi service at the airport.

    e. As a passenger, I want to pre-book a taxi service, so that I can plan my taxi trip in advance.

    f. As a passenger, I want to view bus routes & timings, so that I can use the bus service.

    g. As a passenger, I want to view car rental information, so that I can rent a vehicle.

5. Browsing Immigration Info

    a. As a passenger, I want to view customs information, so that I can read important information related to customs.

    b. As a passenger, I want to view security information, so that I can read important information related to security.

    c. As a passenger, I want to view visa information, so that I can read important information related to visa.

    d. As a passenger, I want to view F1 regulations, so that I can read important information related to F1 regulations.

6. Browsing Baggage Info

    a. As a passenger, I want to view baggage regulations, so that I can read important information related to baggage regulations.

    b. As a passenger, I want to view baggage drop information, so that I can read important information related to baggage drop.

    c. As a passenger, I want to view baggage claim information, so that I can read important information related to baggage claim.

    d. As a passenger, I want to view baggage lost information, so that I can read important information related to baggage lost.

7. Browsing Airport Facilities

    a. As a passenger, I want to view an interactive airport map, so that I can have a

better view for the locations of facilities in and around the airport.

b. As a passenger, I want to view airport lounge meet & greet services information, so that I get information about the airport lounge meet & greet services.

c. As a passenger, I want to view information about dining restaurants in the airport, so that I can explore the dining options available.

d. As a passenger, I want to view information about all shops in the airport, so that I can explore the shopping places available.

e. As a passenger, I want to view information about exchange bureau in the airport, so that I know where to go for currency exchange.

f. As a passenger, I want to view information about Banks & ATMs, so that I can have easy access to my money.

g. As a passenger, I want to view information about Airport lounge, so that I can explore the comforts and services they provide.

h. As a passenger, I want to view information about Other lounge, so that I can explore the comforts and services they provide.

8. Browsing Airport Services

a. As a passenger, I want to view information about eGate service, so that I can be aware of how to use it.

b. As a passenger, I want to view information about self-check-in services, so that I can be aware of how to use it.

c. As a passenger, I want to know where is the prayer room located, so that I can pray.

d. As a passenger, I want to view information about medical services, so that I can get medical treatment.

e. As a passenger, I want to view information about services for passengers with disability, so that I can be aware of how to get this service.

f. As a passenger, I want to view information about cellular carriers, so that I can be aware of how to get this service.

g. As a passenger, I want to view information about smoking areas, so that I can know where to smoke.

h. As a passenger, I want to view information about emergency number, so that I can be aware who to call in case of an emergency.

9. Browsing Tourism Info

a. As a passenger, I want to view sites of interest in the country, so that I know where to go for site seeing.

b. As a passenger, I want to view dining restaurants in the country, so that I know where to go for dining.

c. As a passenger, I want to view shopping places in the country, so that I know where to go for shopping.

d. As a passenger, I want to view hotels in the country, so that I know where to go for hotels.

e. As a passenger, I want to view events in the country, so that I know where to go for events.

10. Browsing About Us Info

a. As a corporate, I want to view information about "who we are", so that I can

know more about client.

b. As a corporate, I want to view information about airport, so that I can know more about client.

c. As a corporate, I want to view biographies, so that I can know more about client.

11. Browsing Airline Developments Info
    a. As a corporate, I want to view information about airline developments, so that I can know more about client.

12. Browsing Cargo Services Info
    a. As a corporate, I want to view information about cargo services, so that I can know more about client.

13. Browsing Business Opportunities Info
    a. As a corporate, I want to view information about advertising, so that I can know how to advertise in airport.
    b. As a corporate, I want to view information about property, so that I can know how to rent property in the airport.
    c. As a corporate, I want to view information about retail, so that I can bring my retail service to the airport.
    d. As a corporate, I want to I want to view tender listings, so that I can bid for providing my services to the airport.

14. Browsing Media Center
    a. As a corporate, I want to view press releases, so that I can get read the airport news.
    b. As a corporate, I want to view photo and video gallery, so that I can view visual content of the airport.
    c. As a corporate, I want to view publications, so that I can read about the airport developments.

15. Managing Access
    a. As an administrator, I want to manage users, so that I can control access to the admin portal.

Optional Requirements

1. Using Chatbot
    a. As a passenger, I want to engage in a conversation with a chatbot to receive airport promos and offers, so that I can know about the latest promos and offers.
    b. As a passenger, I want to engage in a conversation with a chatbot to pin-point the location of the airport terminal facility I am interested in through an interactive airport map, so that I can have a better view of the locations of the facilities in and around the airport.
    c. As a passenger, I want to engage in a conversation with a chatbot to receive general information about the airport terminal and its location.

d. As a passenger, I want to engage in a conversation with a chatbot to find out information about the stage of my journey in the airport, so that I am aware of the flight status, check-in status, boarding status, related timings, expected and scheduled timings of arrival/departure, assigned gates, as well as the relevant locations of check-in counters, self-service kiosks, and boarding gates highlighted on the airport interactive map.

e. As a passenger, I want to engage in a conversation with a chatbot to subscribe to flight notifications relevant to my flight, so that I can be reminded timely about any updates to my flight information.

f. As a passenger, I want to engage in a conversation with a chatbot to receive information about the airlines operating in the airport, so that I can contact them or easily navigate to the airline website to do online check-in or check baggage allowance.

g. As a passenger, I want to engage in a conversation with a chatbot to receive details about long term parking, so that I can be aware of its location and understand important information about it.

h. As a passenger, I want to engage in a conversation with a chatbot to receive details about short term parking, so that I can be aware of its location and understand important information about it.

i. As a passenger, I want to engage in a conversation with a chatbot to receive information about shuttle services, so that I can be aware of their schedules, stops, duration and important details.

j. As a passenger, I want to engage in a conversation with a chatbot to receive information about grabbing taxi services, so that I can hire a taxi service at the airport.

k. As a passenger, I want to engage in a conversation with a chatbot to pre-book a taxi service, so that I can plan my taxi trip in advance.

l. As a passenger, I want to engage in a conversation with a chatbot to receive information about bus routes & timings, so that I can use the bus service.

m. As a passenger, I want to engage in a conversation with a chatbot to receive car rental information, so that I can rent a vehicle.

n. As a passenger, I want to engage in a conversation with a chatbot to receive customs information, so that I can understand important information related to customs.

o. As a passenger, I want to engage in a conversation with a chatbot to receive security information, so that I can understand important information related to security.

p. As a passenger, I want to engage in a conversation with a chatbot to receive visa information, so that I can understand important information related to visa.

q. As a passenger, I want to engage in a conversation with a chatbot to receive information about F1 regulations, so that I can understand important information related to F1 regulations.

r. As a passenger, I want to engage in a conversation with a chatbot to receive

information about baggage regulations, so that I can understand important information related to baggage regulations.

s. As a passenger, I want to engage in a conversation with a chatbot to receive baggage drop information, so that I can understand important information related to baggage drop.

t. As a passenger, I want to engage in a conversation with a chatbot to receive baggage claim information, so that I can understand important information related to baggage claim.

u. As a passenger, I want to engage in a conversation with a chatbot to receive baggage lost information, so that I can understand important information related to baggage lost.

v. As a passenger, I want to engage in a conversation with a chatbot to receive information about airport lounge meet & greet services, so that I am aware of the services provided by airport.

w. As a passenger, I want to engage in a conversation with a chatbot to receive information about dining restaurants in the airport, so that I can explore and locate the dining options available.

x. As a passenger, I want to engage in a conversation with a chatbot to receive information about all the shops in the airport, so that I can explore and locate the shopping places available.

y. As a passenger, I want to engage in a conversation with a chatbot to receive information about exchange bureau in the airport, so that I know where to go for currency exchange.

z. As a passenger, I want to engage in a conversation with a chatbot to receive information about Banks & ATMs, so that I know where to go and can have easy access to my money.

aa. As a passenger, I want to engage in a conversation with a chatbot to receive information about airport lounge, so that I can locate and explore the comforts and services they provide.

bb. As a passenger, I want to engage in a conversation with a chatbot to receive information about other lounges, so that I can locate and explore the comforts and services they provide.

cc. As a passenger, I want to engage in a conversation with a chatbot to receive information about eGate service, so that I can be aware of how to use it.

dd. As a passenger, I want to engage in a conversation with a chatbot to receive information about self-check-in services, so that I can be aware of how to use it

gg. As a passenger, I want to engage in a conversation with a chatbot to receive information about self-bag-drop services, so that I can be aware of how to use it.

hh. As a passenger, I want to engage in a conversation with a chatbot to receive information about medical services, so that I can locate the medical center and get medical treatment.

ii.As a passenger, I want to engage in a conversation with a chatbot to receive information about services for passengers with disability, so that I can be aware of how to get this service.

jj. As a passenger, I want to engage in a conversation with a chatbot to receive information about cellular carriers, so that I can be aware of how to get this service.

kk. As a passenger, I want to engage in a conversation with a chatbot to receive information about emergency numbers, so that I can be aware of whom to call in case of an emergency.

ll. As a passenger, I want to engage in a conversation with a chatbot to receive information about sites of interest in country, so that I know where to go for site seeing.

mm.As a passenger, I want to engage in a conversation with a chatbot to receive information about dining restaurants in country, so that I know where to go for dining.

nn. As a passenger, I want to engage in a conversation with a chatbot to receive information about shopping places in country, so that I know where to go for shopping.

oo. As a passenger, I want to engage in a conversation with a chatbot to receive information about hotels in country, so that I know where to go for hotels.

pp. As a passenger, I want to engage in a conversation with a chatbot to receive information about events in country, so that I know where to go for events.

qq. As a passenger, I want to engage in a conversation with a chatbot to receive information about the airport hotel, so that I know its location and how to book online.

rr. As a passenger, I want to engage in a conversation with a chatbot to receive information about airport Duty free, so that I know its location and be able to access their online website.

ss. As a passenger, I want to engage in a conversation with a chatbot to receive information about car park spaces, so that I know their locations and how to book them.

tt. As a passenger, I want to engage in a conversation with a chatbot to receive information about how to connect to airport WIFI network.

uu. As a passenger, I want to engage in a conversation with a chatbot to receive information about the calling facilities at the airport, as well as their locations.

vv. As a passenger, I want to engage in a conversation with a chatbot to receive information about the weather in country.

ww. As a passenger, I want to engage in a conversation with a chatbot to receive information about the prayer times in country.

Non Functional Requirements / Project Scope

Mandatory Requirements

Non-Functional Requirements	Category
As a business owner, I want to review the experience of the vendor, so that I can ensure the selected vendor is competent in his work.	Competency
As a business owner, I want to ensure the vendor will be responsible for both design and development, so that I can avoid any discrepancies among parties.	
As a business owner, I want to have the domain address be www.abcdefgh.com, so that users access the system from this address.	Availability
As a system architect, I want to host the system on AWS cloud, so that I can ensure continuous availability.	
As a business owner, I want the vendor to host the system under a client AWS account, so that I can ensure ownership of AWS cloud hosting.	
As a business owner, I want the vendor to be in charge of setting up the AWS hosting architecture, so that I can ensure setup is performed by professionals.	

As a business owner, I want the vendor to be fully responsible for support and maintaining of AWS hosting for a period designated in the contract, so that I can ensure full support and maintenance of system hosting.	
As a system architect, I want to setup a high availability infrastructure, so that I can ensure high availability of the system.	
As a business owner, I the vendor to provide budgetary estimates for hosting the system with his proposed hosting architecture, for the length of the support contract period , so that I can allocate yearly budget for hosting.	
As a user, I want to the site to load in less than five seconds, so that I can easily use the site with comfort.	Efficiency
As a developer, I want to make the website scalable enough for 174 simultaneous users, so that I can ensure serving as many users as possible.	
As a business owner, I want to select one out of 3 design templates showcased by vendor, so that I can choose the most suitable design.	Usability
As a business owner, I want to have the selected vendor suggest appropriate visual material, so that I can have expert recommendations.	
As a business owner, I want the selected vendor to suggest appropriate content, so that I can have expert recommendations.	
As a business owner, I want to split content and features between passenger portal, corporate portal and admin portal, so that I can group related information together.	
As a UI designer, I want to conform to client UI guidelines, so that I can ensure a consistent look and feel across the company.	
As a user, I want to have the option to view content in English and Arabic, so that I read content in my preferred language.	
As a user, I want to search the content of the website, so that I can quickly find necessary information.	
As a user, I want to have the choice to use a sitemap page, so that I can navigate the website content at my comfort.	
As a user, I want to a bot to track my activities, so that I can get recommendations from it based on my preferences.	
As an administrator, I want to edit content, so that I can update and maintain the website frequently.	Maintainability
As a system architect, I want to conform to architecture standards and design patterns, so that I can ensure ease of maintainability.	
As a developer, I want to conform to best practices, so that I can ensure ease of maintainability.	

As a developer, I want to code using architectural pattern, so that enhance the readability and maintainability of the code.	
As a developer, I want to conform to coding conventions, so that I can ensure ease of maintainability.	
As a developer, I want to ensure https is set for all connections, so that I can prevent unauthorized listening of communication.	Security
As a developer, I want to enable database encryption, so that I can ensure data is protected.	
As a business owner, I want to ensure information integrity, so that restricted information remains confidential.	Integrity
As a business owner, I want to have a recovery process put in place, so that I can respond to a disaster.	Recovery
As a business owner, I want to have the system backup data frequently, so that I can avoid any data loss.	
As a business owner, I want to have a recovery time of less than one hour if system goes offline, so that I can ensure system is immediately restored.	
As a QA engineer, I want to be able to ensure that all of the test cases are passed, so that I can verify system development is complete.	Testability
As a developer, I want to create a system which is easily testable, so that I can enable QA engineers test the system.	
As a developer, I want to integrate with client flights web api, so that I can retrieve flight information.	Interoperability
As a developer, I want to integrate with a third-party interactive map system, so that I can display interactive maps on the website.	
As a developer, I want to integrate with social media services, so that I can enable easy sharing of information.	
As a developer, I want to integrate with nations Tourism & Exhibitions Authority Integration web api, so that I can retrieve tourism information.	
As a developer, I want to integrate with car rental service web api, so that I can interact with car rental services.	
As a developer, I want to integrate with taxi service web api, so that I can interact with taxi services.	
As a developer, I want to integrate with a flight tracker system, so that I can enable tracking live flights from the website.	
As a business owner, I want to run native IOS and Android apps that feature all functionality of the website, so that I can get better results in quality, speed and the opportunity to leverage mobile features and functionality.	Mobility
As a user, I want to access the website from any mobile device, so that I can	

access content when I'm travelling.

Optional Requirements

As a user, I want to have the choice to chat with an artificially intelligent airport chatbot, so that I can get information in real-time, and in a more user-friendly and personalized way.	Chatbot
As a business owner, I want to use a chatbot solution which has been tested and is operational in multiple airports around the world, so that I am guaranteed with a solution that works for airports.	
As a developer, I want to use an advanced Natural Language Processing Engine (NLP), so that to conform to the best practices and standards of AI and NLP.	
As a user, I want to have the option to choose between Arabic and English Chatbot.	
As a developer, I want to monitor the performance of the chatbot through KPIs, and manage the chatbot activity through a web user Interface, so that I am sure that the chatbot is functioning as expected.	
As a developer, I want the capability to train the chatbot on various formats and questions and possible answers, so that I can improve the performance of the chatbot.	
As a developer, I want the ability to maintain the chatbot by performing data cleaning activities, so that I can rid the chatbot of any wrong or inaccurate information fed to it through natural learning.	
As a developer, I want the ability to maintain the chatbot by validating the conversations that happened, and marking them as correct or not correct, so that I can train the chatbot.	
As a business owner, I want the chatbot to be available on Web, Mobile, and Social media including Facebook and Twitter, so that it is highly accessible.	
As a developer, I want the chatbot to be able to answer the passenger enquiries accurately at least 85% of the times.	
As a developer, I want to integrate with Google Maps location services API, so that I can provide location of the airport and the important facilities around it.	
As a developer, I want to integrate with an API to fetch prayer times, so that I can display prayer times.	
As a developer, I want to integrate with an API to fetch weather information, so that I can display weather conditions in country.	

As a callcenter agent, I want to receive warnings in case the chatbot, after a configurable number of times, is not able to answer the enquiries of passengers, so that I can intervene and type on behalf of the chatbot.	
As a developer, I want human intervention to be handled through a chat support application which integrates with the chatbot through an API.	
As a user, I want to have the choice to interact with the chatbot through text, and optionally, voice, as that is easier and more user-friendly.	
As a developer, I expect the vendor to fully train the chatbot on common airport use-cases and make it ready before the launch of the new airport.	
As a developer, I want to integrate with client flights web api, so that I can retrieve flight information for the chatbot to use.	