Cathay Pacific

CX Studio - Food and Beverage Function

Group 5
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1. Introduction

To deliver the idea of life well travelled.

1,1. Purpose and Scope

What do millennials want while travelling? To understand what they want, we have to first understand who they are. Millennials are the people born after 1985. They are addicted to mobile and social media. They are impatient and picky. Therefore, when it comes to travelling, what they want is a personalised service, a service that allows them to get what they want in seconds, a service that allows them to be understood as much as they want to be understood.

Millennials are not just the people who are flying to cathay pacific, but also the cabin crew members. They deserve to experience “Life well travelled”, even when they are on duties. What do they want the most while working? A simplified workload would be great.

How to use technology to deliver a life well travelled experience to both customers and cabin crew? An extended function based on CX Studio would help, such as an onboard food and beverage function.

In the following sections, we will explain the system function as well as architecture.

1.2. System Overview

The purpose of the system is to let millennials to order food, drinks and ask flight attendants questions through the in-flight system. When customers order, their requests will be sent to the system and flight attendants will be notified. There are two ways for customers to order, one through a catalog, one through the chatbot. Customers can search through the catalog or use the chatbot to order food and drinks. Their request will then be sent to the flight attendants. Flight attendants will know what exactly they ordered according to their seat number, where they will bring out food in the sequence that it was ordered. To the customers, this system brings convenience as they do not have to interact with the staff to request for service. To the flight attendants, it saves time for them to walk back and forth, taking orders and bring out food.

2. System Architecture

2.1. Hardware

(i) Server

The server of the proposed application share the media content streaming system on aircrafts. Such system are currently equipped on Cathay Pacific's Airbus A350 and Cathay Dragon's Airbus A320. Passengers onboard can connect to the server using their smart devices, for example smartphones, tablets, and laptops.

(ii) Devices

The proposed application allow passengers to connect to the system with their smart devices, such as smartphones, tablets, and laptops. The devices must be Wi-Fi enabled to make the connection.

Crew members will use the devices assigned to them by the company to log on to the system. These devices will also be Wi-Fi enabled to connect to the proposed system.

(iii) Database

The server of the proposed application will host a database of the requests and messages. The database will allow flight crew members to access to the request history whenever necessary.

2.2. Software

The proposed application serve the need of respective clients through different mobile apps.

(i) Passenger app

The following module will be added to the existing Studio CX and Studio KA application that stream media content to customer.

Log-on Module

The log-on module is responsible to allow passengers to log-on to the system by scanning their boarding pass. This allow the crew members to locate the seat where the request originated from and make the delivery accurately.

Chatbot Module

The Chatbot module will display the selection items filtered using passengers' input. Passenger may use usual text to input their need and the application will select the

applicable food or beverage items that seemed suitable for the passenger. Passengers may make their final choice, input quantity they wanted and submit the request to the flight crews in the galleries.

Some screen captures are available in Appendix 1.

(ii) Crew member app

The proposed system will require an extension from the existing crew member app. The following module would be necessary:

Order Processing Module

The order processing module will display passengers' requests in the crew members' tablets. When new requests are submitted, they will be pop-up in the end of a request queue. Crew members are supposed to serve the requests in chronological sequence. They can remove the request from screen when the respective request is fulfilled.

Some screen captures are available in Appendix 2.

3. Database Design

order (<u>oid</u>, seat, submitted)

Table Name		**order**	
Description		Store order id and the originated seat number	
Content Desciption			
Field		Data Type	Description
PK	oid	INT(11)	Identifier of one order
	seat	VARCHAR(4)	Seat number of the order
	submitted	DATETIME	Time when the order is submitted

order_item (uid, oid, fid, quantity, status)

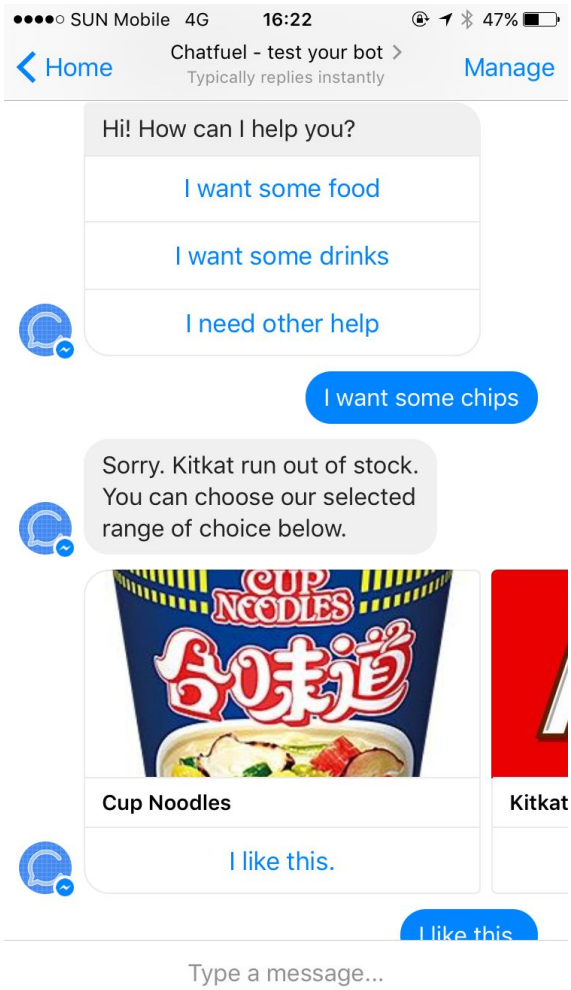
Table Name		**order_item**	
Description		Store the item in an order	
Content Desciption			
Field		Data Type	Description
PK	uid	INT(11)	AUTO_INCREMENT identifier
	oid	INT(11)	Identifier of one order
	fid	INT(11)	Identifier of a food/beverage item
	quantity	INT(6)	Quantity needed
	status	INT(6)	1 - Received 2 - Served 99 - Out of Stock

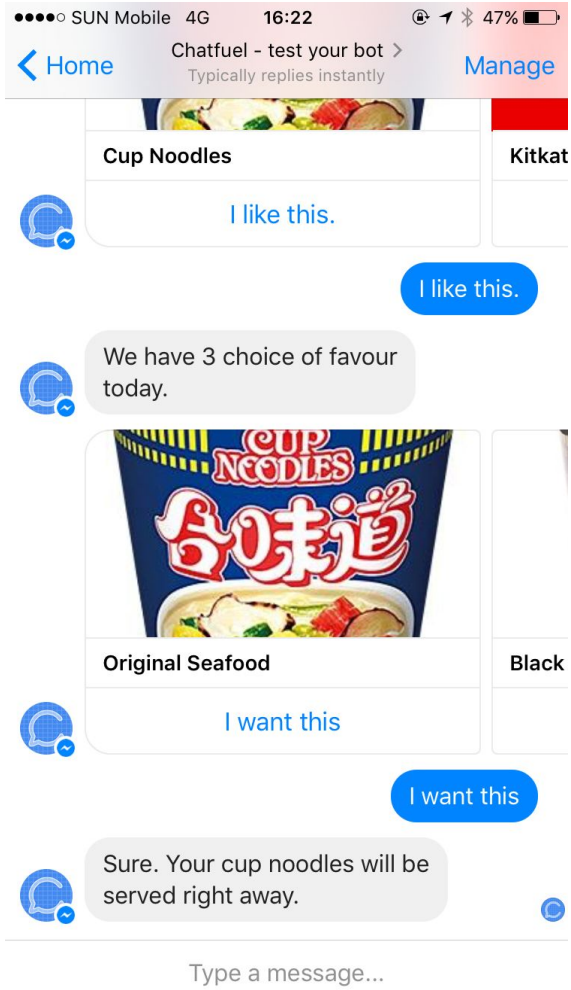
food (fid, name, description, image)

Table Name	**food**
Description	A catalog of food and beverage items
Content Desciption	

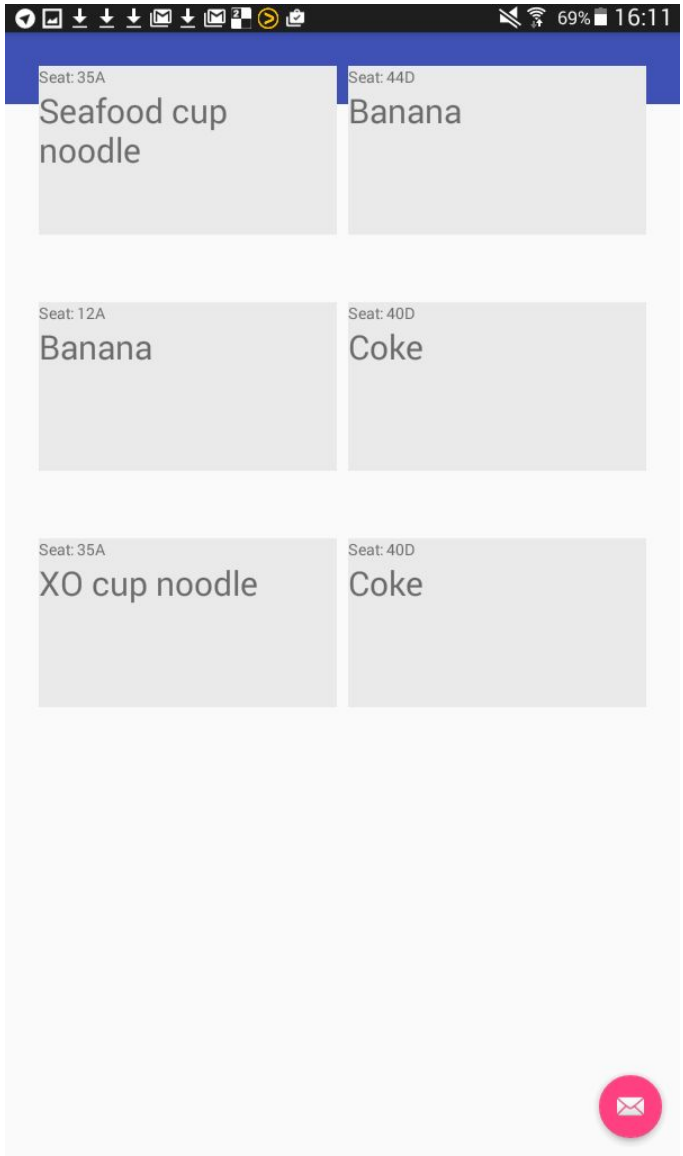
Field		Data Type	Description
PK	fid	INT(11)	Identifier of a food/beverage item
	name	VARCHAR(256)	Name of the food/beverage item
	description	LONGTEXT	Description of the food/beverage item
	image	VARCHAR(64)	File path to the image

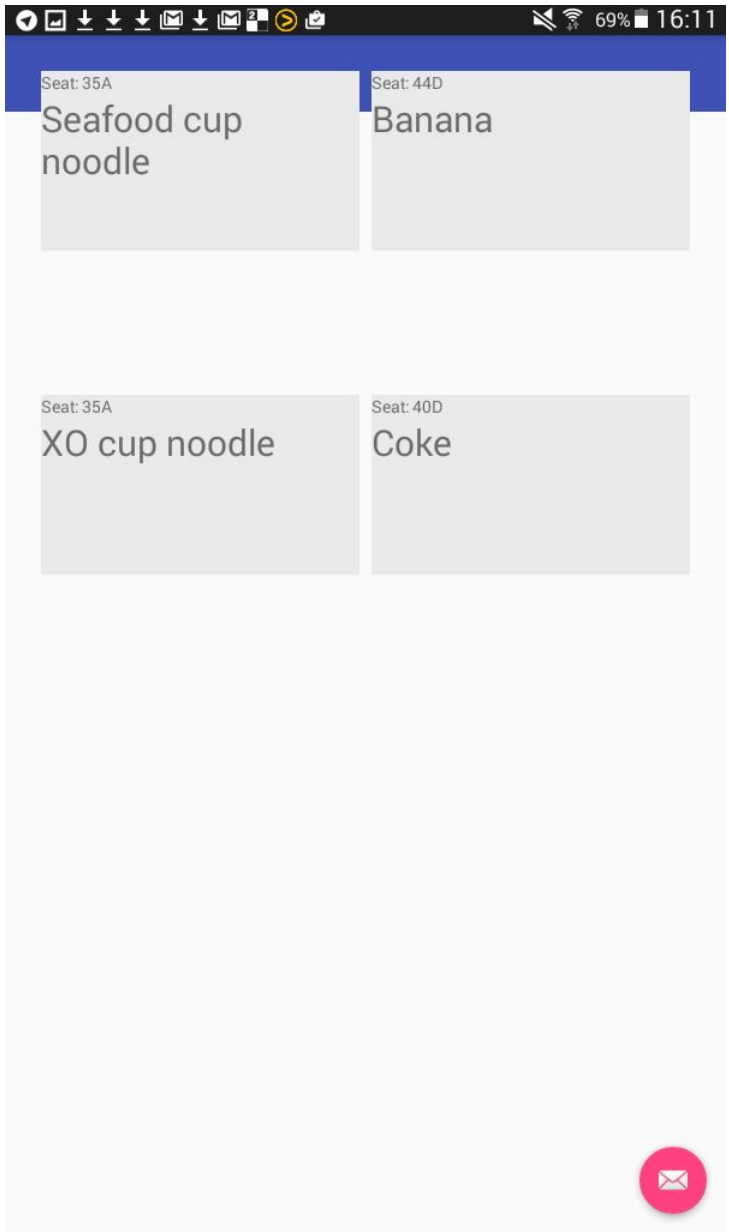
Appendix 1. Screen Capture of Chatbot Module





Appendix 2. Screen Capture of the Crew Member Module




69% 16:11
Seat: 35A
Seafood cup noodle
Seat: 44D
Banana
Seat: 35A
XO cup noodle
Seat: 40D
Coke


69% 16:11
cathay_assessmentcentre
Hamburger
Remaining Quantity: 10
Hamburger
Remaining Quantity: 10
Hamburger
Remaining Quantity: 10
Hamburger
Remaining Quantity: 10
FOOD
DRINK
SNACK
OTHERS