

## **Rachel Evans - Homework Lesson 14**

### **Process Flow Design**

#### **Requirements**

A website (front end) which the user can browse and also a search option so that the user can request specific times and film details.

Booking system - the user will be able to choose a film and time of their choice and once a booking is secured this will update the database.

Payment system - this will link with the booking system. User must be able to link their card details or payment systems such as PayPal in order to secure the booking.

A database with details of the films. showing times, locations of the cinemas where each film is showing. This database would also have details of customers and their bookings. It would also mean that users can book quickly and easily (with option to store their payment information for additional convenience). Also contains details of a mailing list for targeted marketing.

If a new user the ability to either book and pay as a "guest" or to register their details and be added to the database.

Potentially could create a chatbot service to help anyone with their booking/answer any questions they may have.

#### **Considerations**

Legal compliance of the application - e.g GDPR laws apply within the EU so database/booking system in relation to the storage of data would have to comply with these regulations.

Security - how will the system be kept safe from potential cyber attacks and hacking for user and payment details?

Scaleability - what is the prospective customer base, i.e. how many users and how many cinemas will the booking system incorporate. Will this need to be scaled to add more cinemas and customers as times goes on? Will it need to serve millions of users?

Current scope of the company - is it a multinational. Is this a booking platform which will be used across several different countries? What impact will this have on the key requirements of the app? Also, the legal framework in which the app will operate may differ according to each country.

Cost - how much money is in the budget? How much will the ideal system cost - is it affordable? If not what are the main priorities, the must-have versus the nice-to-haves?

Time to market - how much time is there to develop the system and the application? Again, this leads to the priority question - what must be done first and what can be done later as an add on?

Native mobile app versus hybrid or web app - what is the best type of application for the booking platform? Have to consider when and where the user is most likely to make a booking.

#### **Common/main problems**

Payment issues - connectivity between three different platforms - client front end, bank/payment system and the database. Three systems which all need to be working in order for the process to run smoothly.

Busy web traffic times when users want to book a film - e.g. everyone booking for a James Bond film as soon as times are released. How will the server cope with a high volume of booking requests from the app?

Web connection issues - what happens if this happens during the booking process?

### Tools/components

HTML and CSS for the front end webpage content.

An API could be created which could connect the client-side front end to the database and to any payment/banking system.

A programming language such as Python would be use for the back end logic to query a relational database containing the film and user data.



