

CMPE2002 - Assignment 1 - Problem Statement 1 ‘Customer Lineup’ Connor Kuljis 19459138

Introduction

This document will cover; the suitable requirement elicitation techniques to analyze the requirements, and the relevant modeling diagrams to show aspects of the system. There are a wide variety of requirement elicitation (RE) techniques that suit the requirements gathering process for the “CLup: Customer Lineup” project. Requirements engineering often has no “right way” when designing requirements for a software system, and such requirements may change over time. Requirement elicitation methods include; introspection, background reading, hard data, interviews, surveys, meetings, focus groups, brainstorm/JAD, prototypes, ethnomethodology, participant observation and knowledge elicitation.

Methodology

When gathering requirements, it is often important to do some background reading on the domain to see if there exists any similar systems within that domain. This may be in the form of researching related applications. Upon researching online, a highly relevant example is the appointment booking website ‘HotDoc’ - <https://www.hotdoc.com.au/> which allows users to book appointments for general practitioners around Australia. This ‘hotdoc’ system overlaps with the key covid-19 related issues ‘CLup’ is trying to solve. Such as incorporating a time slot booking system, mobile check-ins and ‘place in queue’. The advantage of this background reading is that it helps define business objectives and how a similar approach could be inspired and adapted to a grocery store.

To further gather requirements I have combined introspection and brainstorming to elicit requirements. Generally a brainstorm is a creative technique to rapidly visualise ideas of how to solve problems. By reading the problem statement an analyst can come up with potential ideas and characterise topics for discussion. For example - who are the potential stakeholders of the product? What is the ‘problem’ that the project is aiming to solve? By using introspection, some potential users of the product may be - the users themselves, employees, managers, maintenance ect. In essence ‘CLup’ is a response to the covid-19 pandemic limits the number of customers in the store, leading to hour long queues outside the store.

Assumptions

The application is a web and mobile based platform. Managers may want to edit opening hours through the application. Instead of having separate accounts for employees, they can download the app and create QR codes via guest.

Reflection

One challenge encountered was eliciting the requirements for the ‘fallback option’, where physical tickets/QR codes are given out by hand. Upon review of my analysis, it seems that I have made an oversight and that the system does not fully support this ‘offline’ feature. For example, how will the person with the physical ticket be notified that their ticket has been called? A potential solution to this is to have a large electronic display outside the store, but this may conflict against the issue that the software is trying to solve. Further analysis is required. Furthermore as I brainstormed introspectively - my analysis is susceptible to self bias and a lack of others opinions. Because of the absence of feedback from others my inherent bias may have impacted the overall design.

Conclusion

To conclude I have used brainstorming, introspection and background reading to analyse the information to; identify key actors in the system, modelled potential use cases and functionality of the system, how each use case may occur in sequence and graphed activities in the system.

References

RE-Requirements Elicitation, CMPE2002, Curtin University, accessed September 2020.

RE-Requirements Modeling, CMPE2002, Curtin University, accessed September 2020.

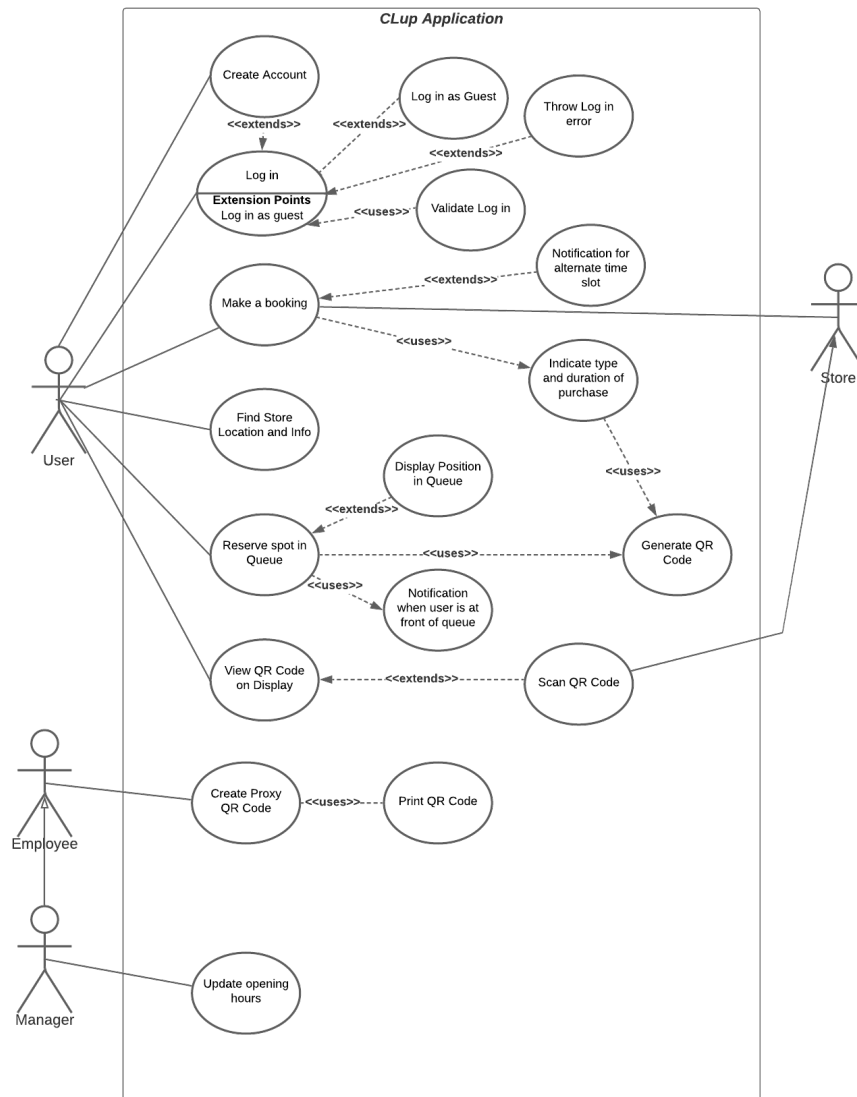
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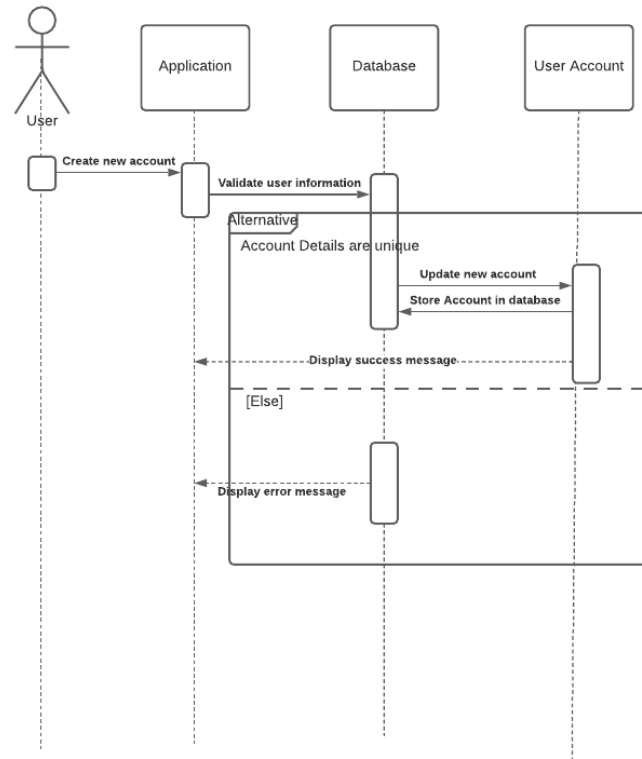
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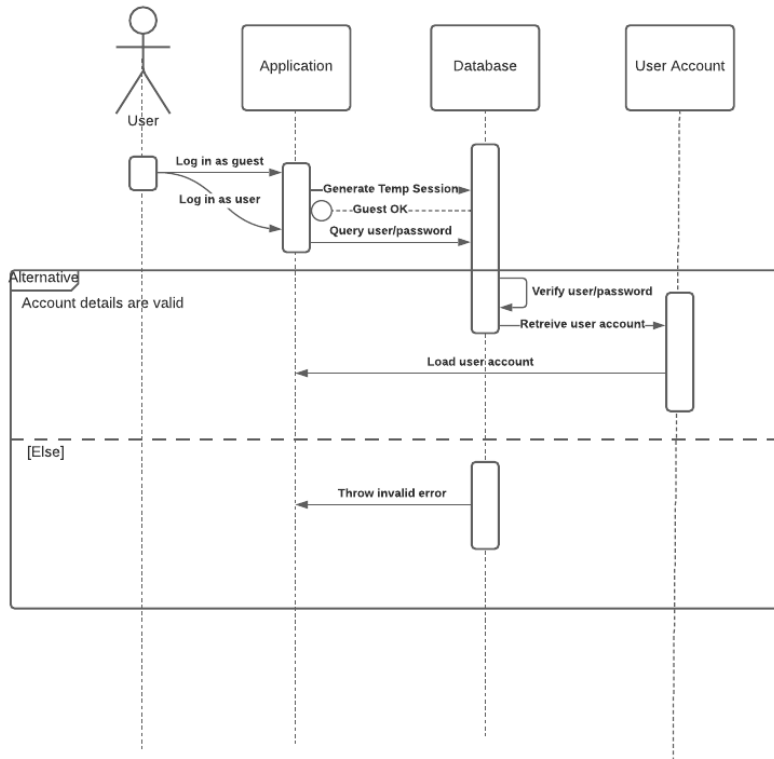
<https://lucidchart.com>



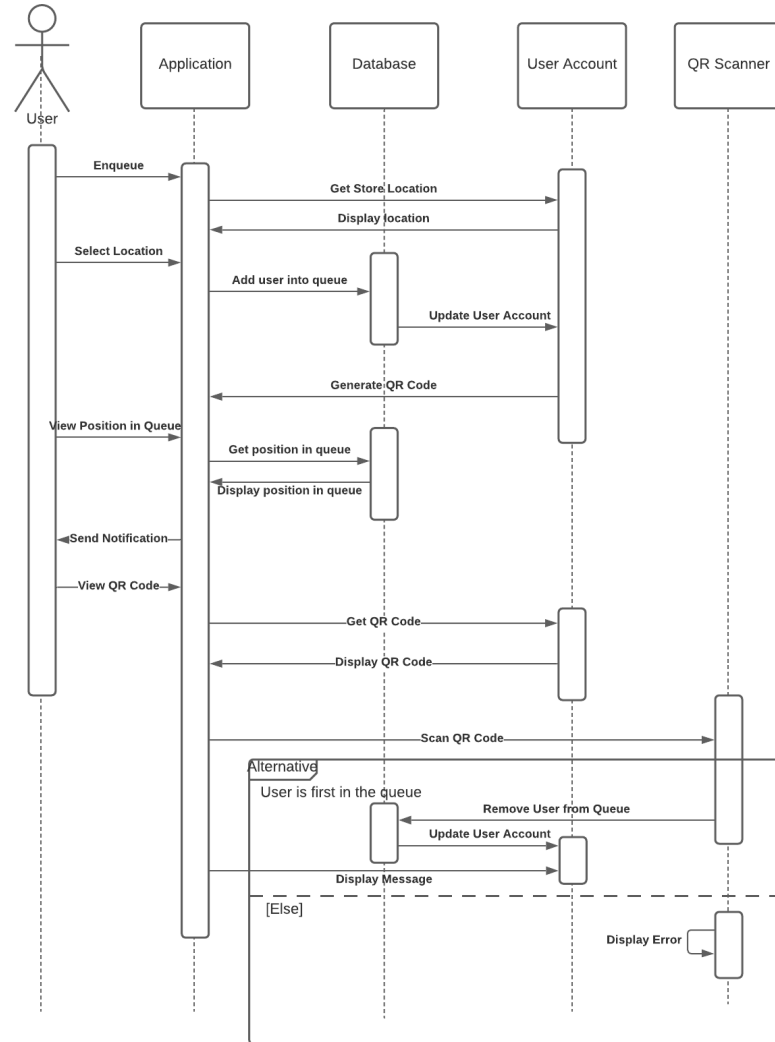
UML Sequence Diagram - Create Account



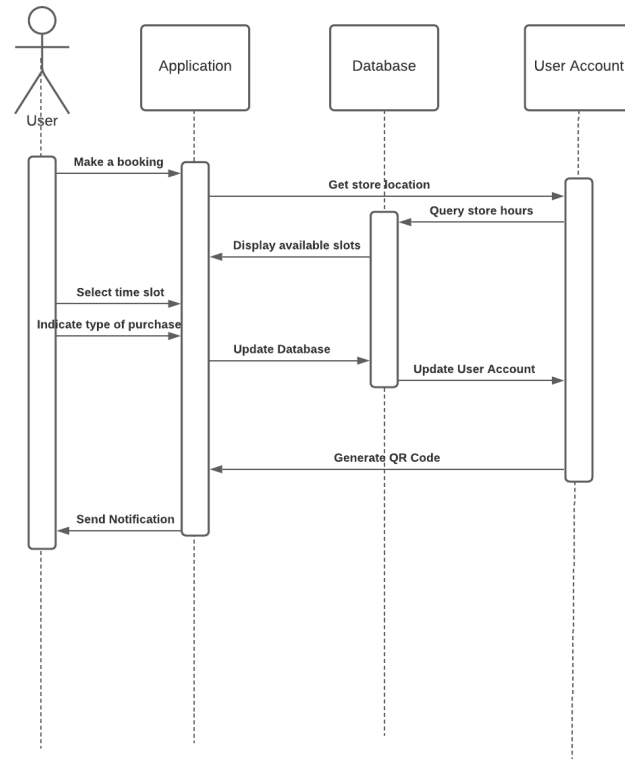
UML Sequence Diagram - Log in



UML Sequence Diagram - Queue System



UML Sequence Diagram - Booking



UML Sequence Diagram - Store Locate

