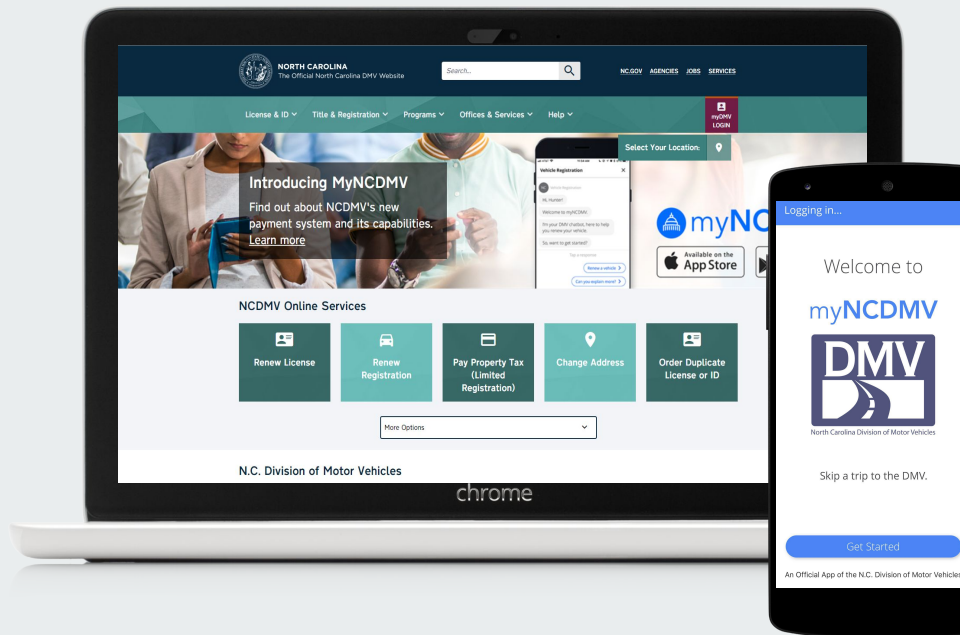


NC DMV Project Proposal & Wireframes

Joan Xia | UNC-Chapel Hill | 2019



Outline

1. Problem, Opportunities & Objectives
2. Data Collections
3. Feasibility Test
4. Solutions Proposal
5. Wireframes
6. Schedule of Development
7. Next Steps

The Problem, Opportunities, & Objectives



01 Problem

NCDMV has been plagued by problems of long wait times and low customer satisfaction for a while.

Negative feedback from customers &
Current strategies are ineffective.



02 Opportunities

NCDMV is attempting to improve its operation efficiency through various approaches.

MyNCDMV Mobile App

Streamlining HR Process

These approaches have not been very effective which allows for the opportunity to implement new features into the app.



03 Objectives

Our project aims to improve customer experiences in the DMV by developing a software system to alleviate its current situation.

Better allocation of services

Quick check-in procedure

Significantly reduced wait times

More people acquiring efficient services

Easy-to-use

Integrating into current System

Data Collection Methods



Secondary Data Collection

- Explore solutions relating to long wait times issue

Questionnaire Survey

- Masses' attitudes toward NCDMV operations

In-depth Interview

- Insights from both customers and officers.

Feasibility Analysis

Technical, Operational, Economical



Technical Feasibility

Developers:

- Small team of 8 developers
- Sufficient knowledge of both app development and NCDMV Operation
- Well managed and under the correct path towards final goals

Users:

- Cover all types of DMV customers
- Practical and accessible
- Adoption process



Operational Feasibility

Objectives:

- Development team fully understands the problems, opportunities, and goals.
- Able to accomplish all the tasks

Day-to-day Operation:

- System will be implemented by developers following the agenda
- User-friendly to all types of current/new users also operable by DMV staff



Economic Feasibility

Cost:

- One-time cost ~ \$250,000
- Recurring cost for 1 year ~ \$10,000

Benefits:

- Intangible ~ 10+
- Tangible benefits for 1 year ~\$50,000

Solution Proposal



Alternative Solutions

Virtual line-up System

DMV Express Lane

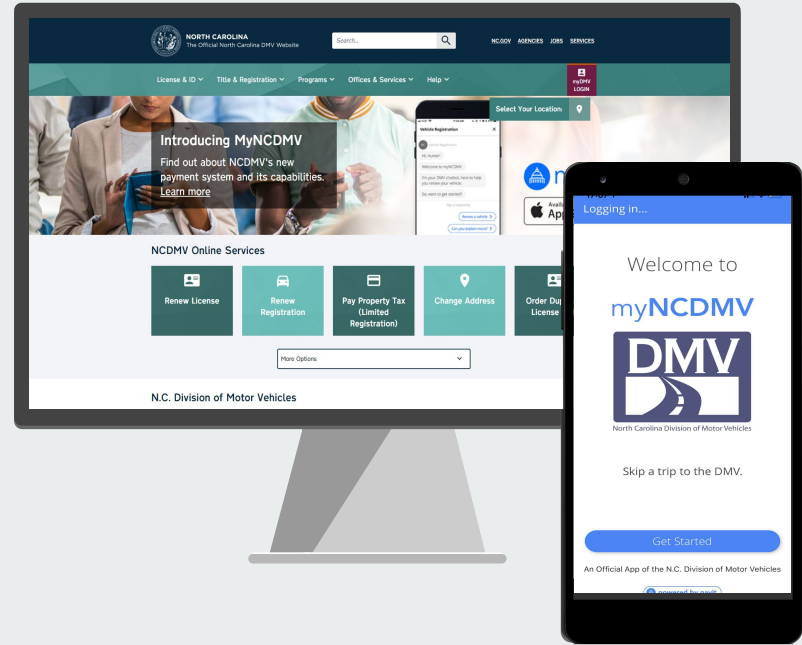
Office Location Tracking

More Online Services

Appointment Only

Solution Proposal

An mobile app functionality targeting **two types of users** and integrated into current NCDMV system that would help speed up registration process and reduce waiting times at DMV office.



1. Plan the Trip

Virtual Line-up + Location Finding

1. Customers **sign up/log in** and enter necessary info about their trip
2. **Filter out** the customers who have chosen the services that are available online
3. Find **least occupied** office nearby
4. Join the virtual line with number and an estimated time
5. **Real time monitoring**
6. Show up at the office at the meeting time



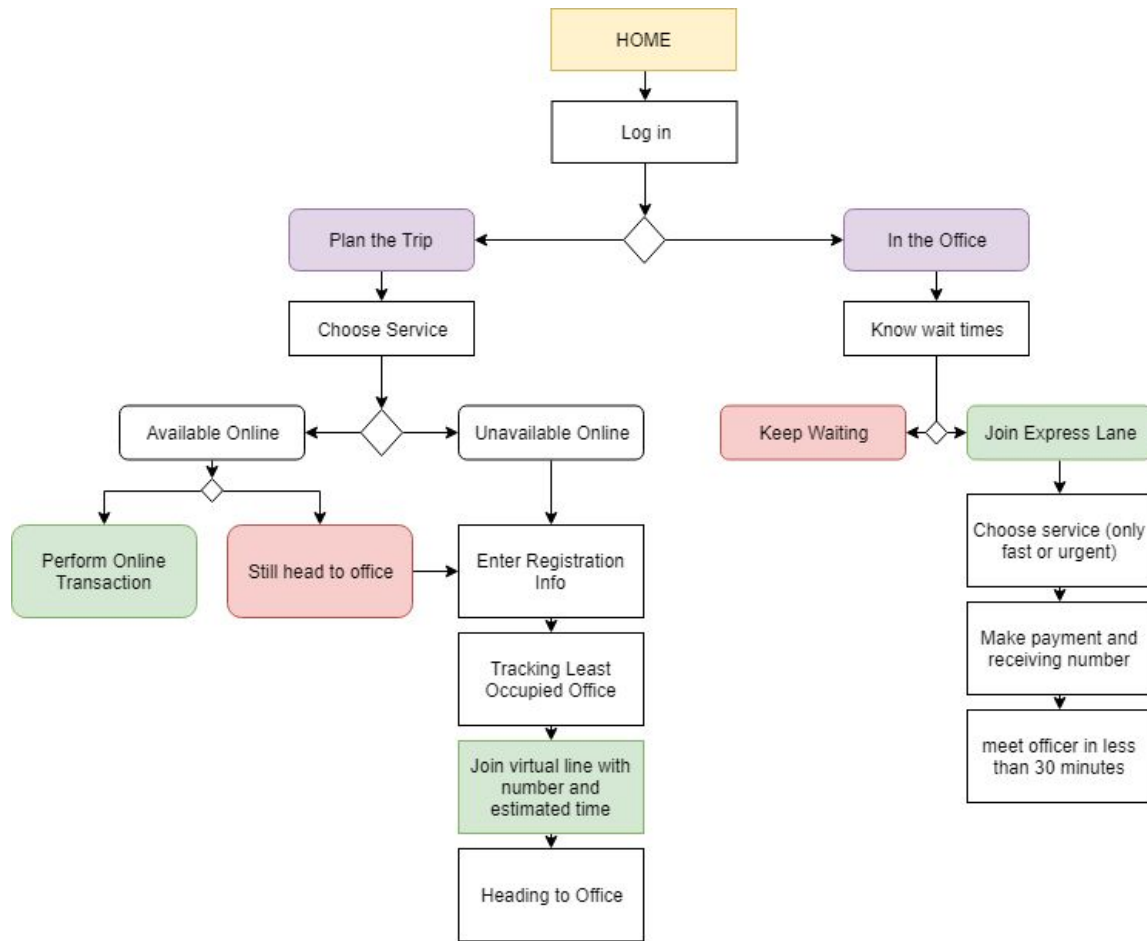
2. Save the Time

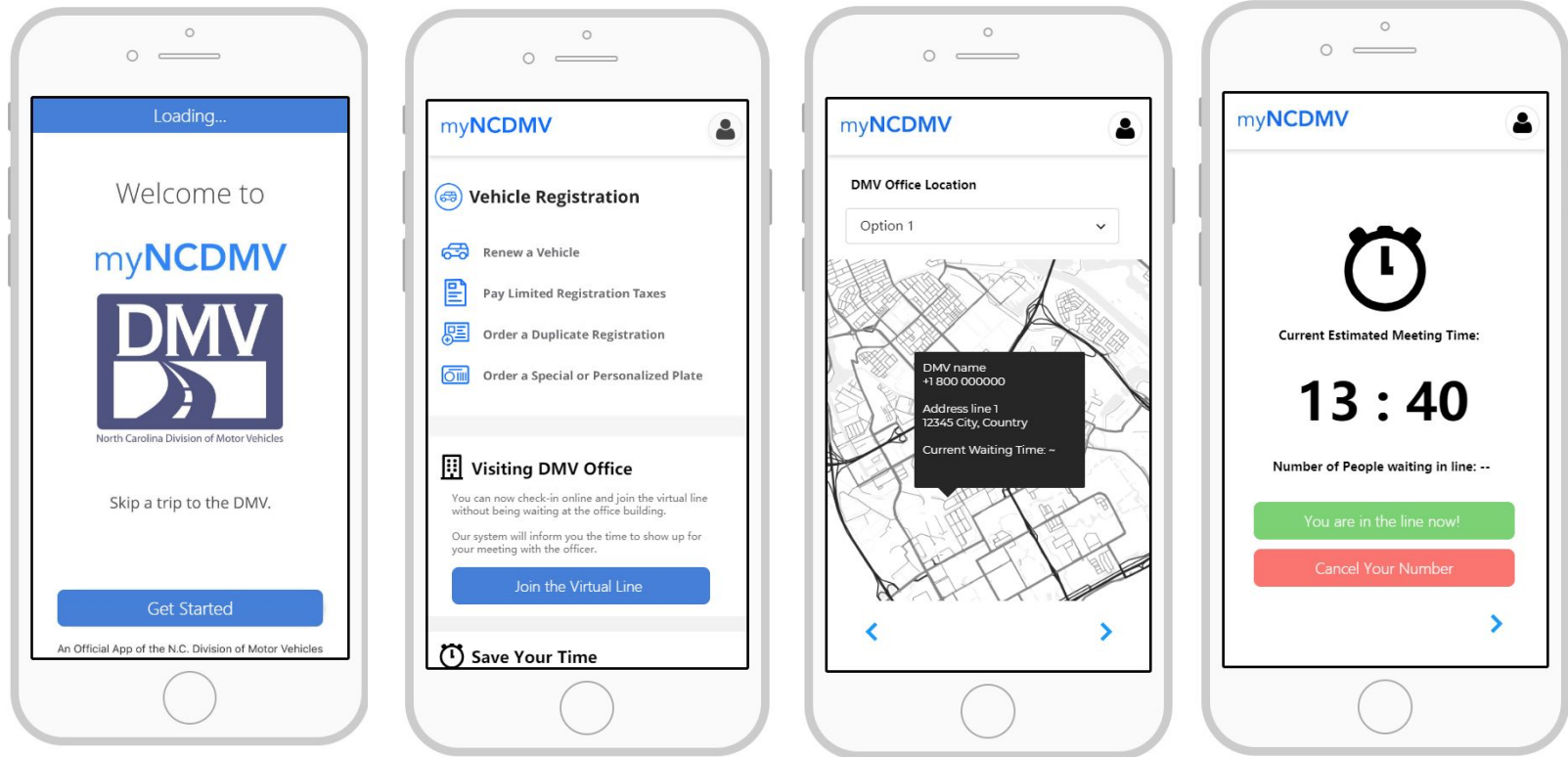
Express Lane + Convenience Fee

1. Visitors show up in the office to do **quick/urgent** transactions
2. Choose to wait, or **pay to join a fast lane** specially handling quick transactions
3. Wait times less than **30 minutes**
4. Faster service with better experience



Wireframes





Wire Frame & Interactivity



Next Steps

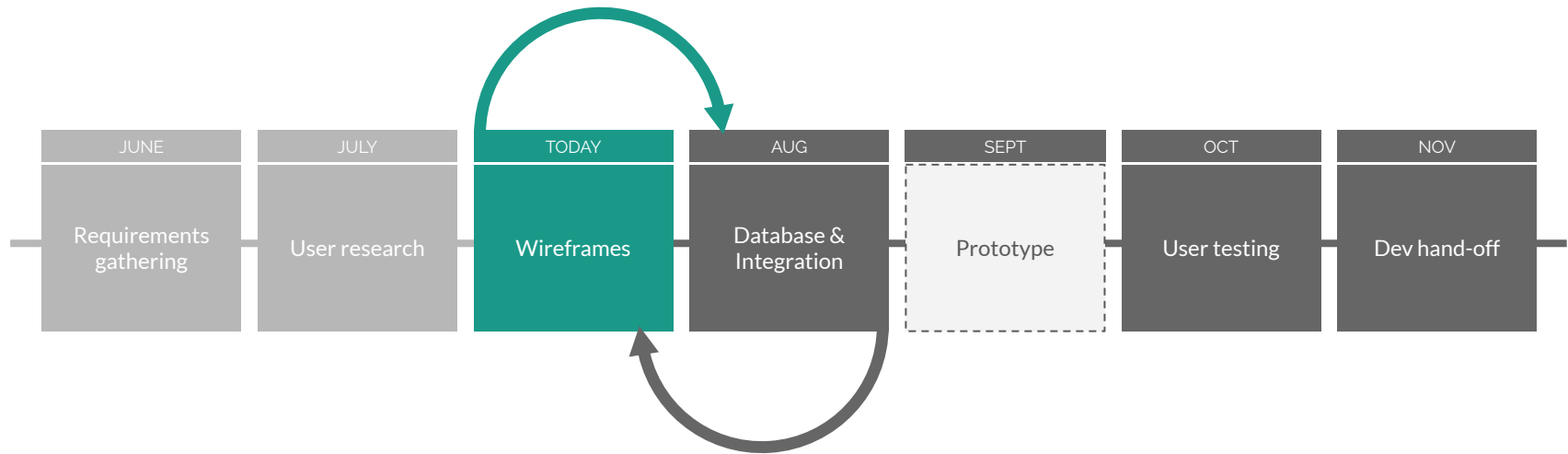


Implementation

- Create Database
- Prototype
- Integration
- **Test & Maintenance**



Timeline



Questions?
