

**MICHIGAN STATE**  

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**U N I V E R S I T Y**

# Project Plan

## Jeffrey - Virtual Insurance Claim Advisor

### The Capstone Experience

Team Auto-Owners

Nabiha Biviji

Mick Dickmann

Alex Klingel

Connor Stabnick

Department of Computer Science and Engineering

Michigan State University

Fall 2018



*From Students...  
...to Professionals*

# Functional Specifications

- Mobile App
  - Allow users to file claims with virtual assistant
  - Enable policyholders to file their own claims
  - Automation to simplify claim process
  - Gather loss details efficiently
  - File transfer (photos, videos, documents)
- Web Portal
  - Allow claim representatives/agents to view submitted claims



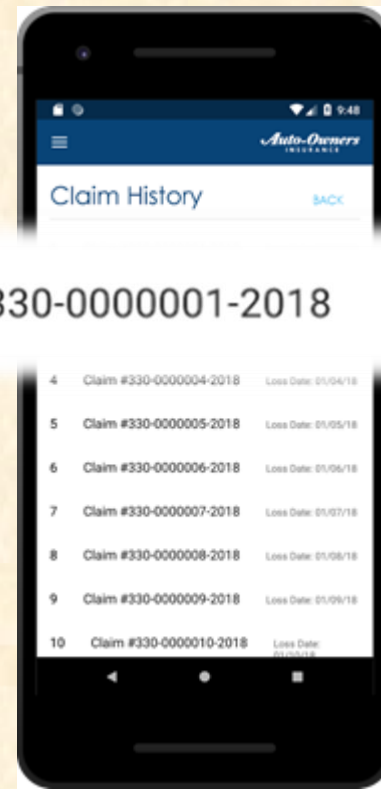
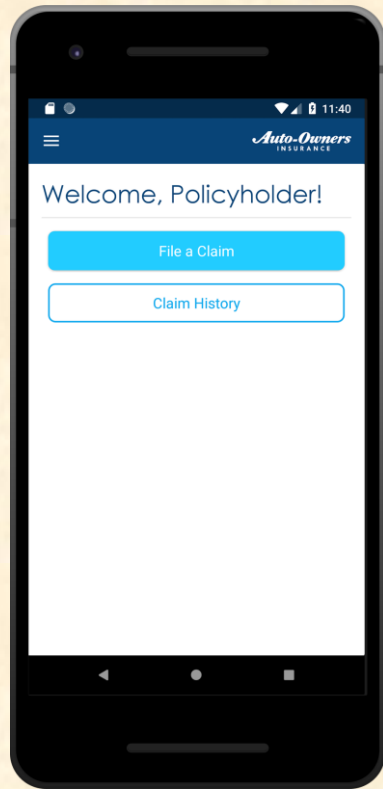
# Design Specifications

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- Conform to Auto-Owners UI standards
  - Mobile App - External
  - Web Portal - Internal
- Simple/Responsive User Interfaces
  - Mobile App - Different OS/Dimensions
  - Web Portal - Multiple Browsers



# Screen Mockup: Mobile Interface



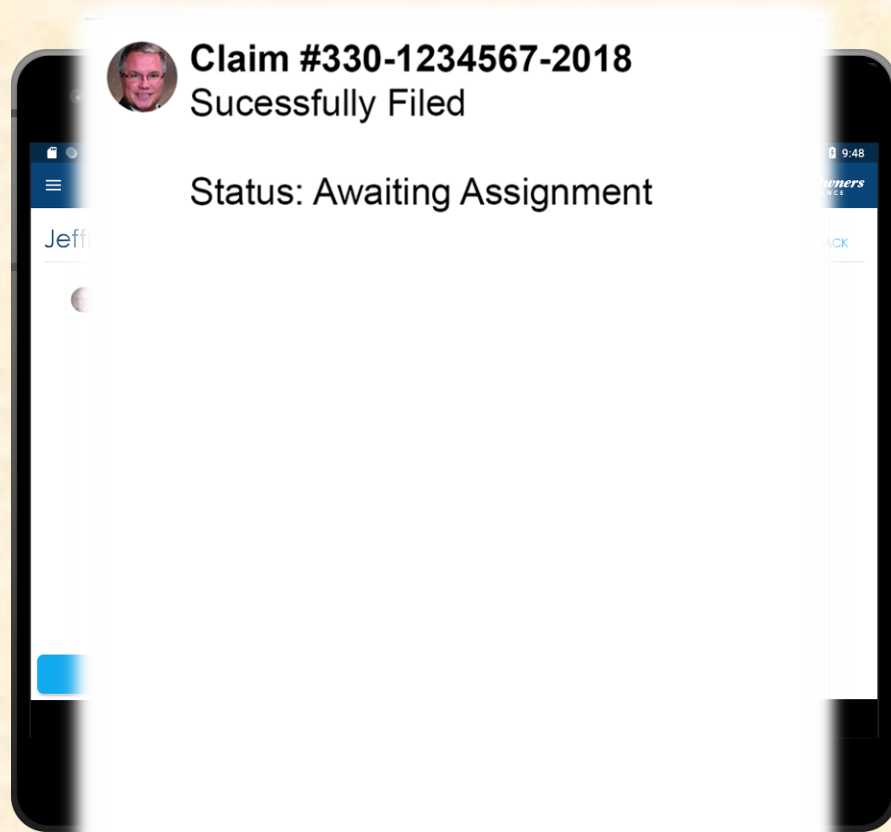
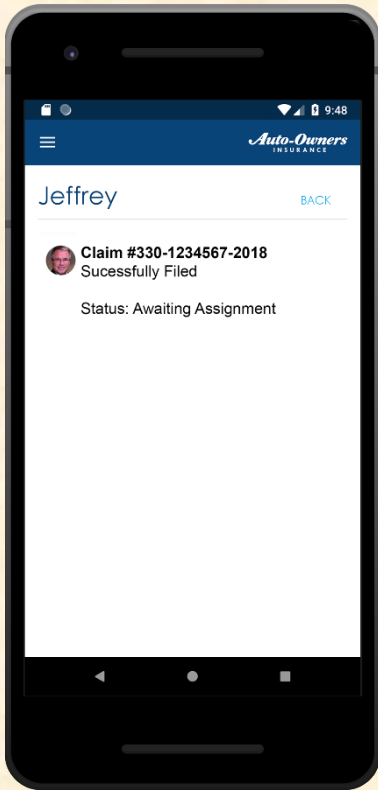
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Claim #330-0000001-2018

Loss Date: 01/01/18



# Screen Mockup: Jeffery Interaction



# Screen Mockup: Web Portal Dashboard

## Loss Description

Claimant was driving down I-75 and was struck from behind by Semi-truck. Deer jumped on car and broke windshield post collision

## Risk Units

001 Ford F-150 Raptor 2018



## Assigned Claim Branch

Albany, MI

### Loss Description

Claimant was driving down I-75 and was struck from behind by Semi-truck. Deer jumped on car and broke windshield post collision

### Loss Location

Lansing, MI 48917  
6101 Anacapri Blvd

### Photos



### Risk Units

001 Ford F-150 Raptor 2018

### Contact for Loss

John Test  
248-908-7896

### Assigned Claim Branch

Albany, MI

### Notes

Insured brother was driving vehicle. Brother is not listed on policy. Uninsured Motorist coverage present on policy

## Loss Location

Lansing, MI 48917  
6101 Anacapri Blvd

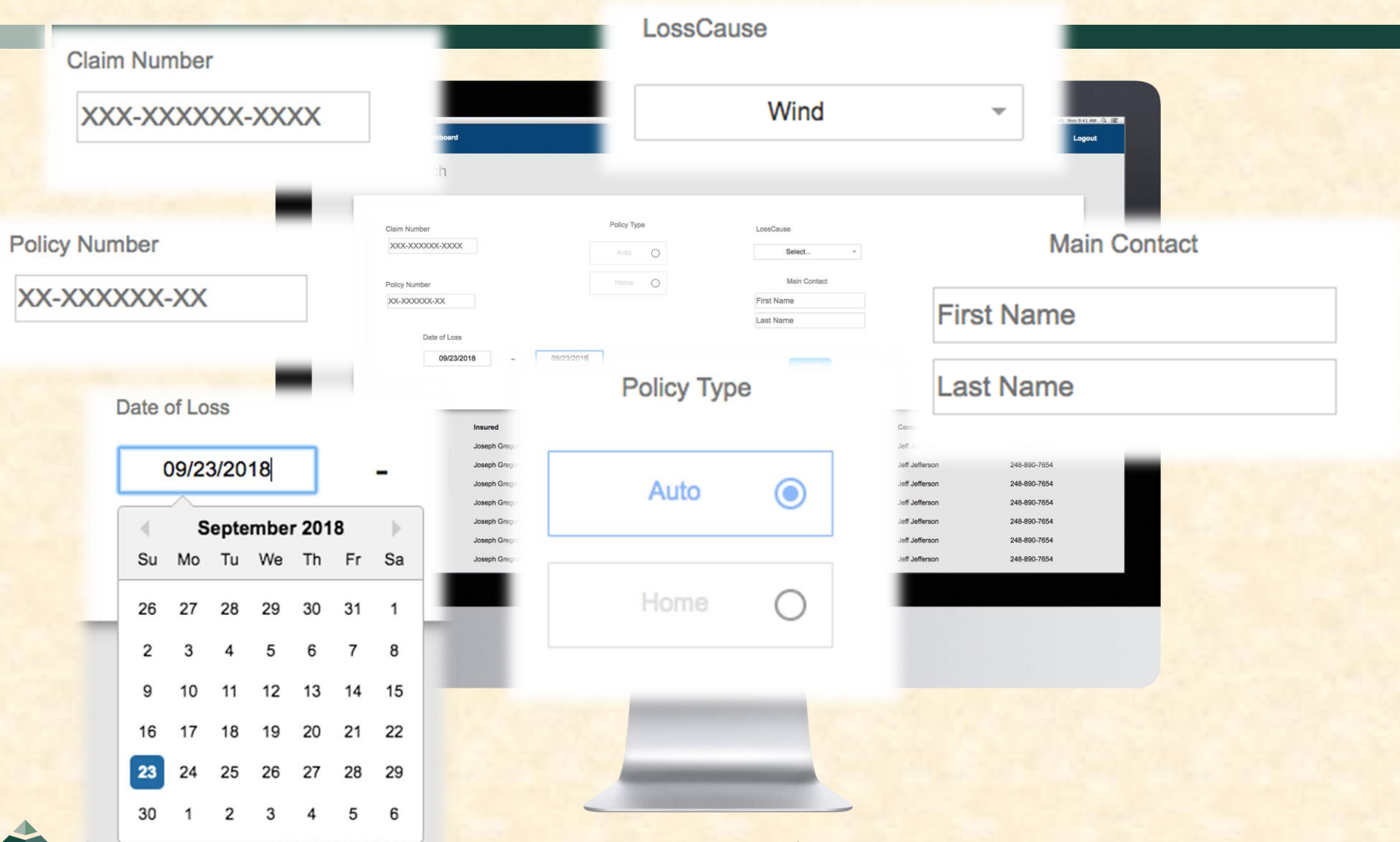
Date	Insured	Type	ClaimNumber
-018		Contact for Loss	
-018		John Test	
-018		248-908-7896	

## Notes

Insured brother was driving vehicle. Brother is not listed on policy. Uninsured Motorist coverage present on policy



# Screen Mockup: Search



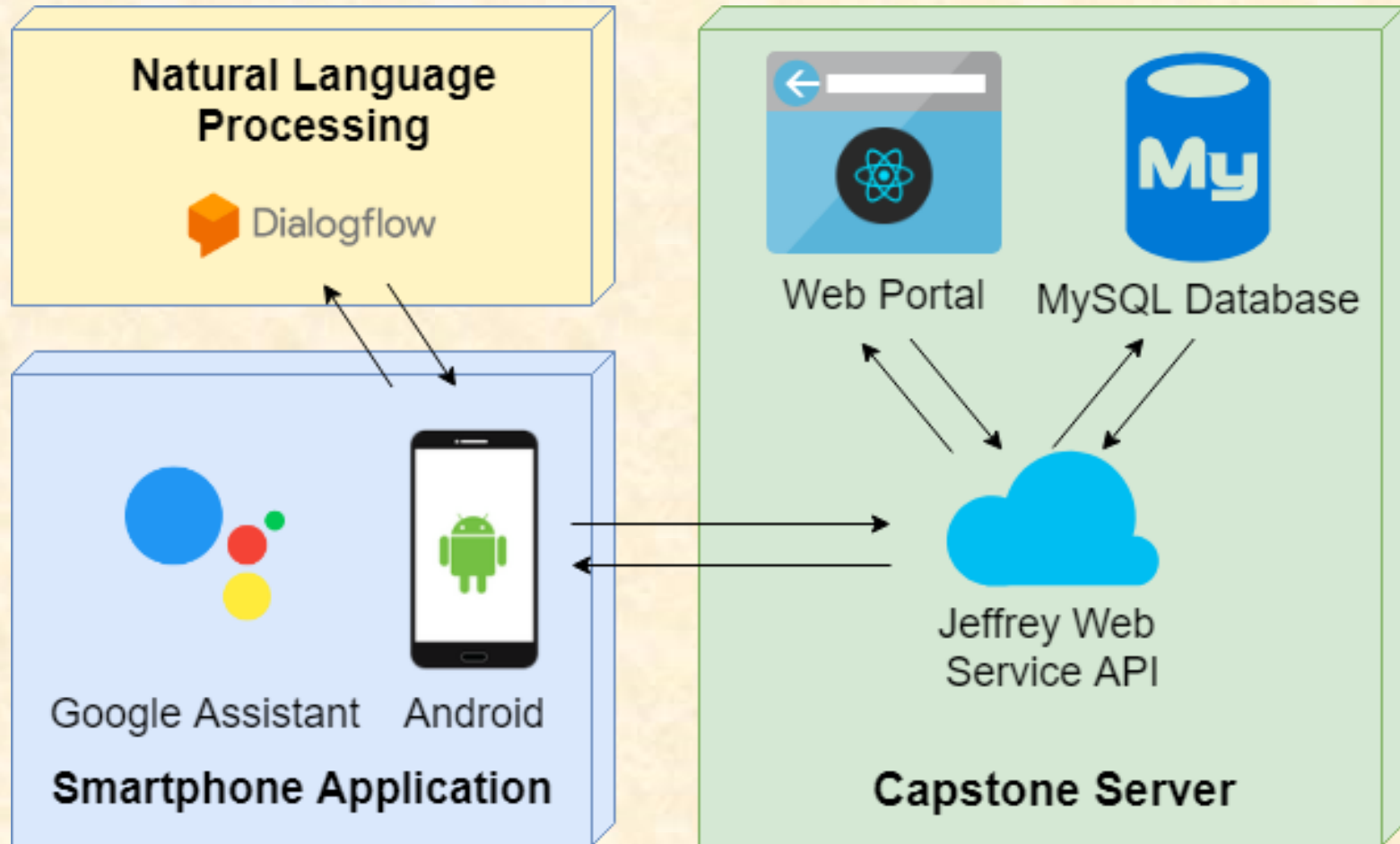
# Technical Specifications

- RESTful API built with Kotlin
  - Spring Framework
  - JDBC to connect to MySQL database
- Mobile App platform specific development
  - Android Studio/Kotlin
- Dialogflow integrated into Mobile app
  - Google Assistant
- Web portal built using React





# System Architecture



# System Components

- Hardware Platforms
  - Smartphone
  - Capstone Server
- Software Platforms / Technologies
  - Android / Potential iOS
  - Dialogflow / Google Assistant
  - Kotlin / React
  - Ubuntu Server
    - Apache & MySQL



# Risks

- Proper handling of secure information
  - Confidentiality of insurance claims is required
  - SSL for connection, encrypted files on server
- User Authentication
  - Users will need to be validated in a secure manner
  - Don't store passwords on server, validate with hash
- Dialogflow Integration
  - Dialogflow and Google Assistant need integration with app
  - Research and experimentation, rapid prototyping



# Questions?

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