

MICHIGAN STATE
UNIVERSITY

Project Plan
Mobile Audit Itinerary
The Capstone Experience

Team Auto-Owners

Jacob Burger
Garrett Stevenson
Ladi Oyeleye

Department of Computer Science and Engineering
Michigan State University

Spring 2014



From Students...
...to Professionals

Project Overview

- Underwriting Field Service Representatives
- Updates Policy Information via Excel Sheets
- Cannot update policies on the go

- Mobile Audit Itinerary App

Functional Specifications

- Login System
- Collect and update policy holder information
- Manage Itinerary
- Google Map with Driving Directions
- Generate PDF Report
- Import and Export files
- Available both on and offline
- Cached locally for offline use
- Responsive Design



Design Specifications


- Login Page
- Main Page
- Main Page Offline
- Mobile
- Mobile Offline
- Generate Report
- Import Data



Screen Mockup: Main Page

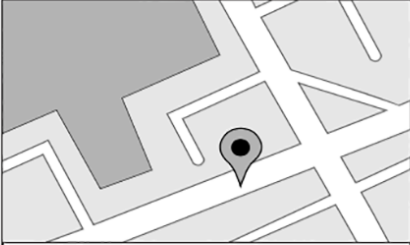
Moqzilla

← → ↻ 🏠

Home Import Data Export Data Generate Report User 

Itinerary

So and So LCC
Go Go Toys >
Jiffy Clean
Sponge Co.
Izzo Name Drops



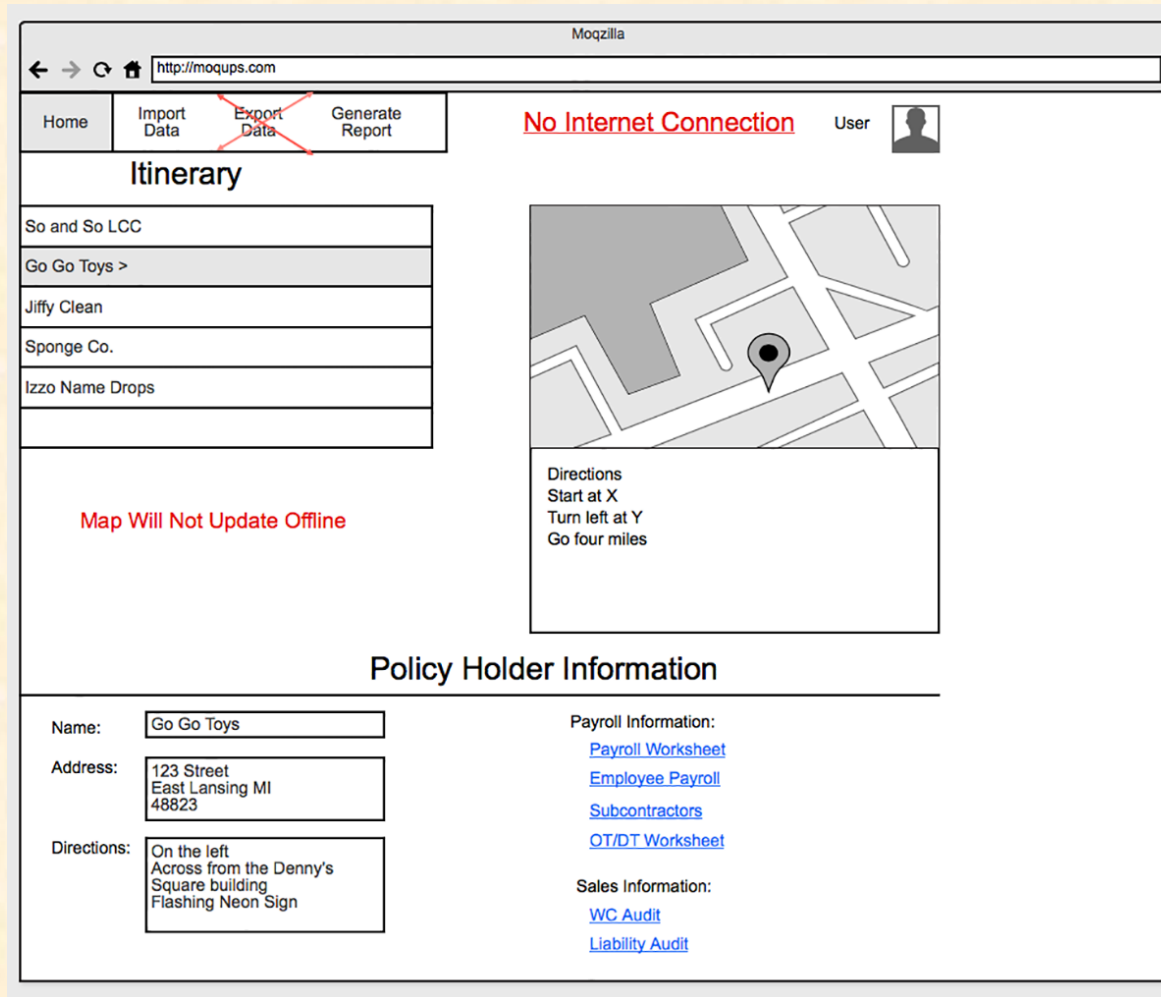
Directions
Start at X
Turn left at Y
Go four miles

Policy Holder Information

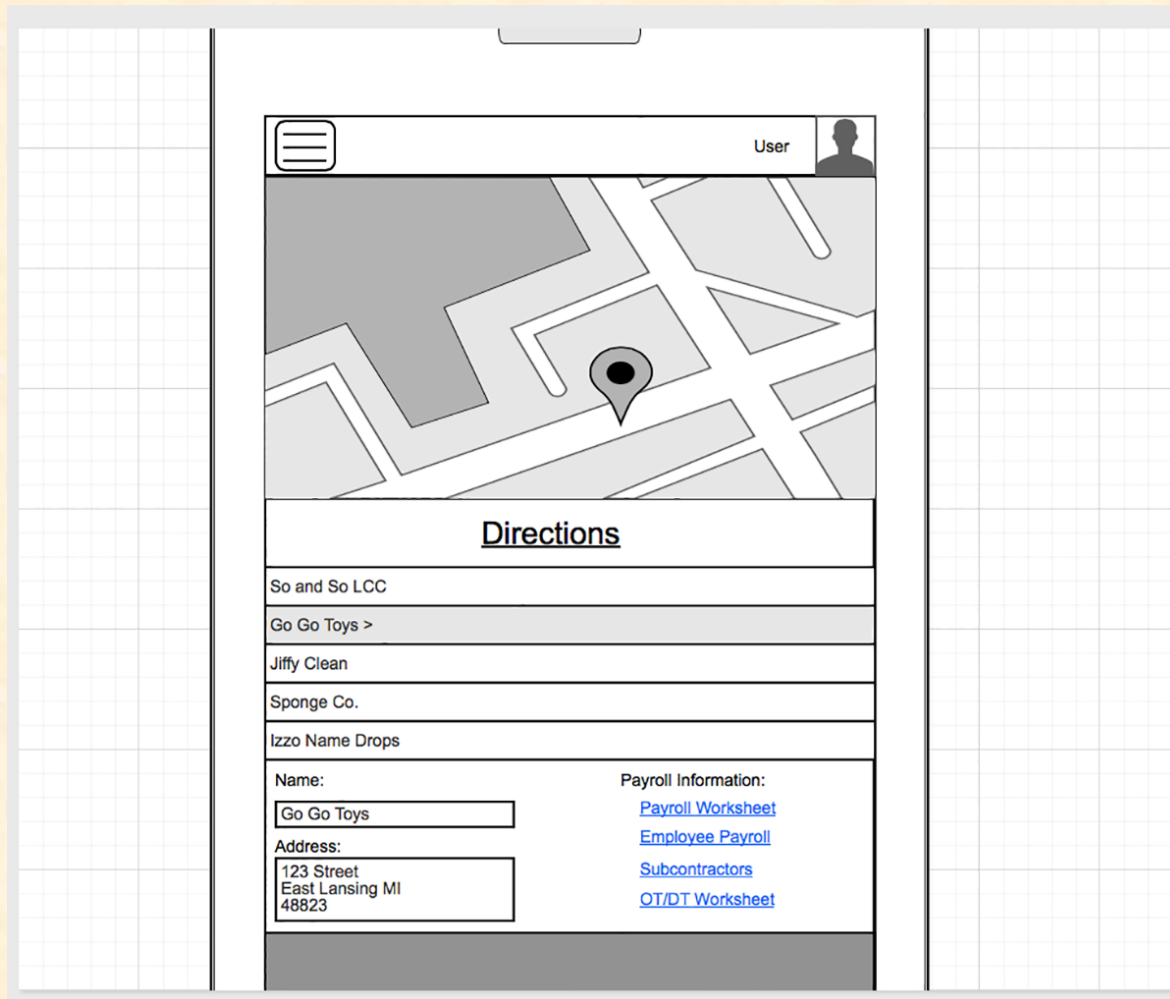
Name:	<input type="text" value="Go Go Toys"/>	Payroll Information:	Payroll Worksheet
Address:	<input type="text" value="123 Street
East Lansing MI
48823"/>		Employee Payroll
Directions:	<input type="text" value="On the left
Across from the Denny's
Square building
Flashing Neon Sign"/>		Subcontractors
			OT/DT Worksheet
		Sales Information:	WC Audit
			Liability Audit



Screen Mockup: Main Page (Offline)



Screen Mockups: Mobile Application

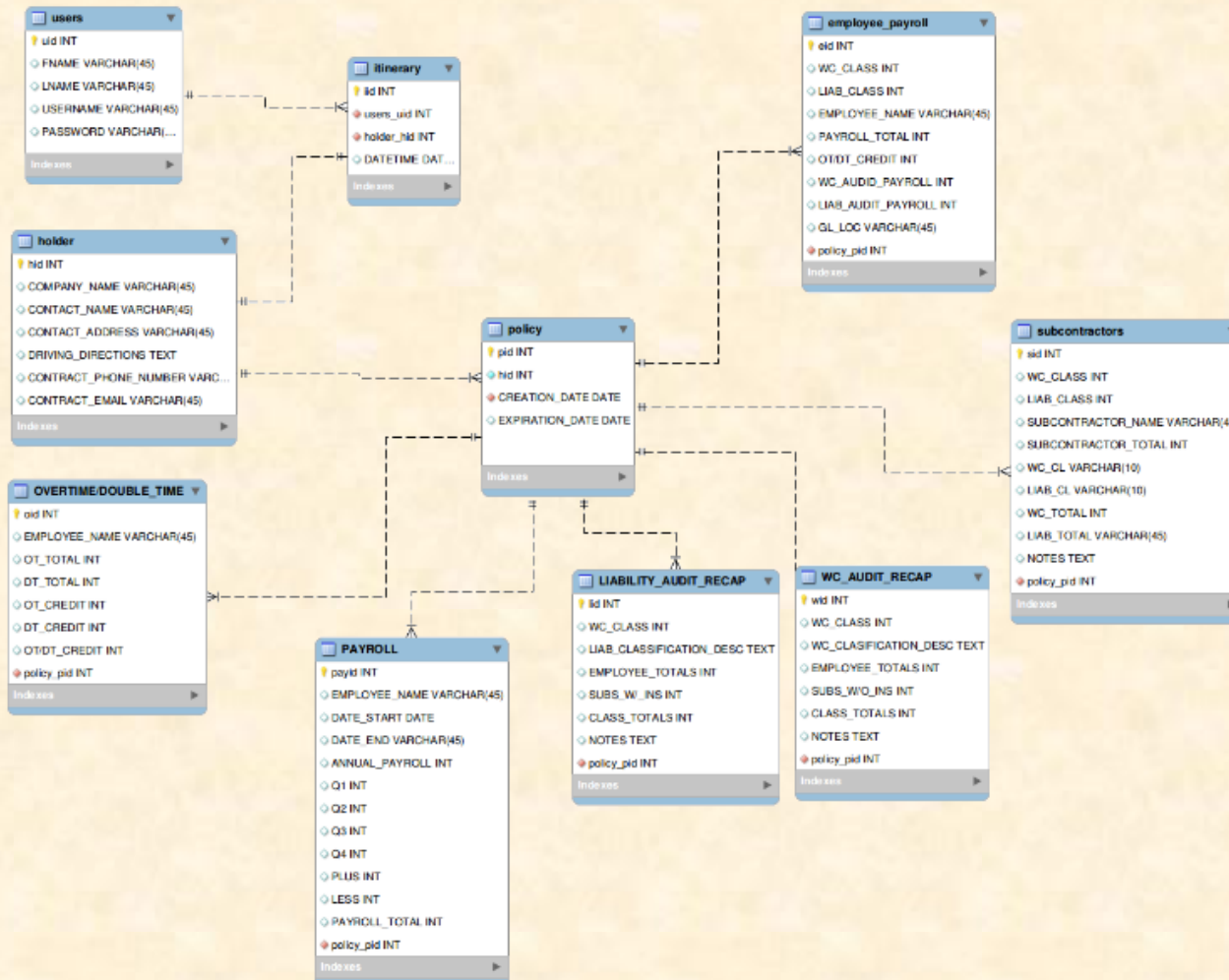


Technical Specifications

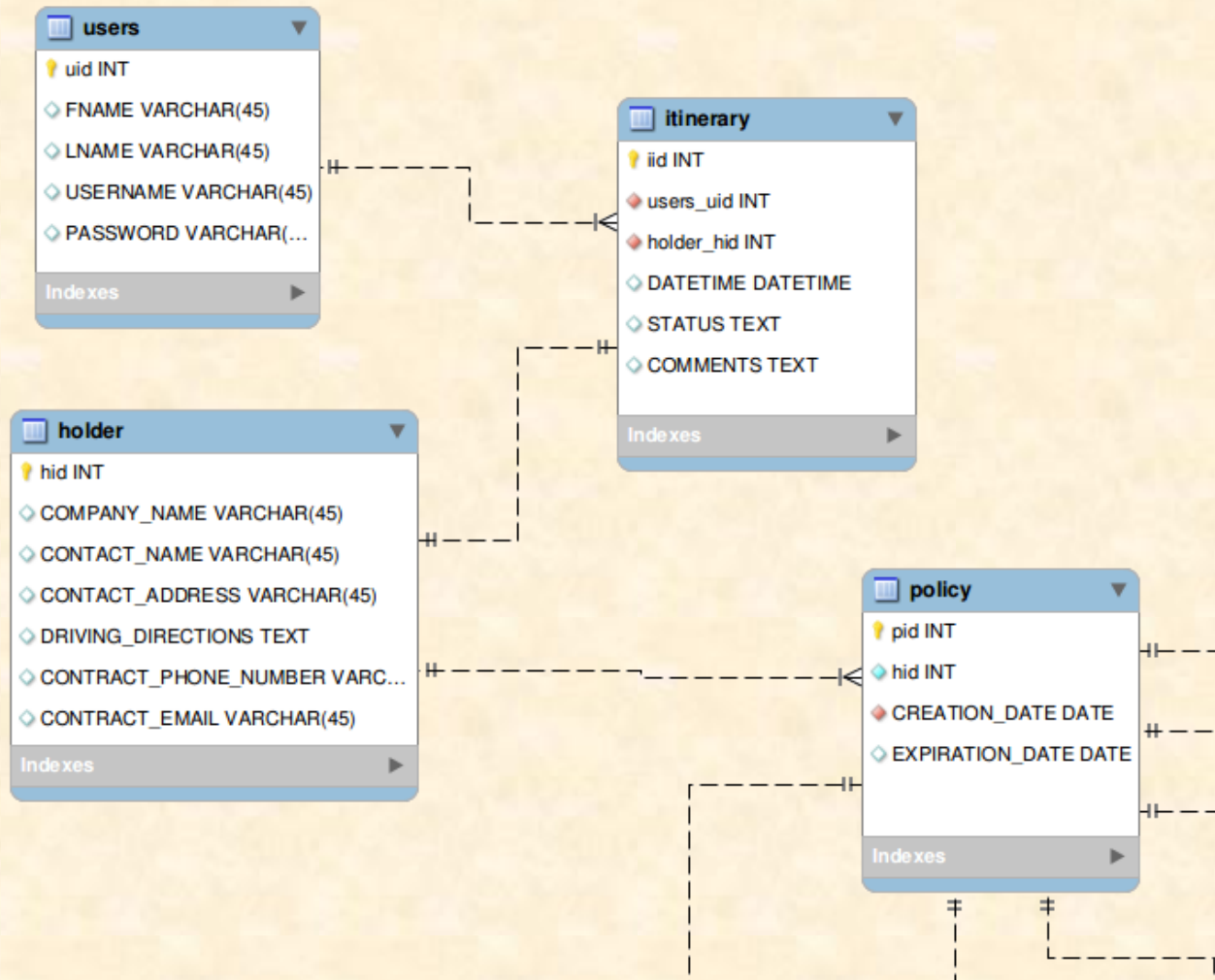
- HTML5
- CSS3
- Javascript
- jQuery
- JavaServer Pages
- Bootstrap



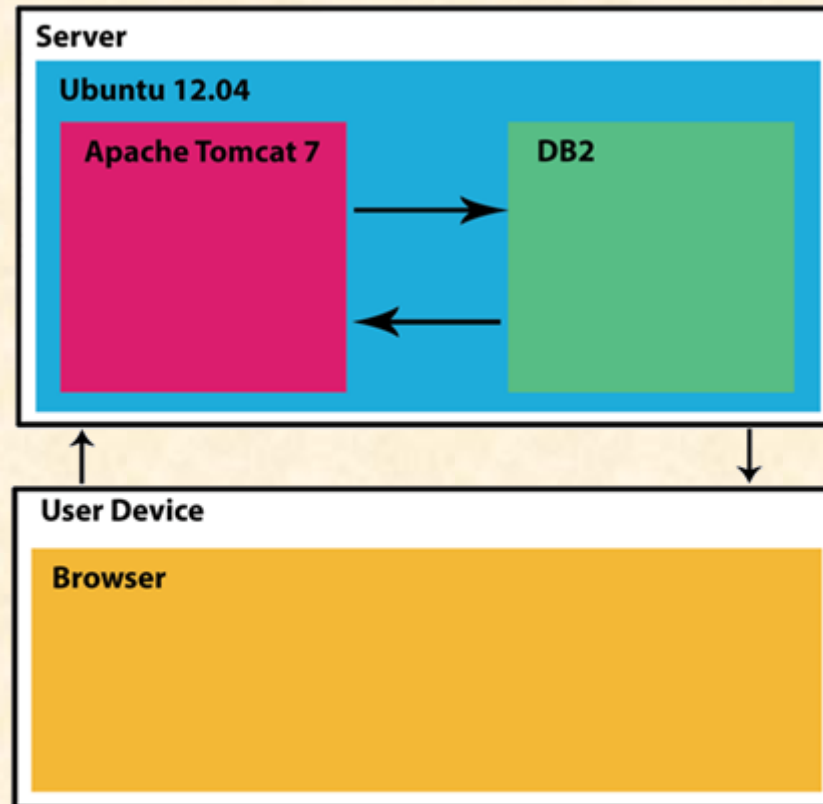
Technical Specifications



Technical Specifications



System Architecture



System Components

- Hardware Platforms
 - Dell PowerEdge R210
 - 2.8 GHz Intel Xeon X3460
 - 8GB 1333 MHz Dual Ranked UDIMM
- Software Platforms / Technologies
 - Apache Tomcat7
 - Ubuntu 12.04
 - IBM DB2



Testing

- Rapid Prototyping
 - Offline Caching
 - User-Interface
 - PDF Generation
 - XML Import/Export
- Frequent Check-ins with Client
 - Verify Standards

Risks

- DB2 database
- Client-Side PDF Generation
- HTML5 Caching
- Excel Spreadsheet Migration