Project Plan
HR Recruiting System

The Capstone Experience

Team Auto-Owners Insurance
Gauthier Devolder
Jun Gao
Ashwin Jayakumar
Abigael Onchiri

Department of Computer Science and Engineering
Michigan State University
Fall 2015
Functional Specifications

- Two responsive web based applications
- Applicant system that will help simplify their job application process, as well as identify ways to get more applicants into their applicant pool through google analytics
- Recruiter System that will allow recruiters to view and manage applications, track and manage recruiter events, as well as allow recruiters to communicate with applicants more effectively
Design Specifications

- Applicant System Pages - “About Auto-Owners” career page, Application Page.
- Recruiter System Pages - Login Page, Applicant Profile page, Recruiter Actions page, Recruiter Events Page
- Applicant System features - Multiple Input Methods (Text entry, Data pulls from LinkedIn, Data Scraping from Resumes, Speech Recognition), Google Analytics
- Recruiter System features - Recruiter Workflow (Request Video Recordings, Request Interview, Send Letters, Manage/record in Applicant’s Files), Track/Manage recruiting events
A career at Auto-Owners is challenging and rewarding. As insurance industry representatives, our associates have an opportunity to meet the ever changing social and economic needs of our policyholders. Our group of caring associates create financial security by helping individuals and businesses make a new start when a loss occurs. Listed to the right are several of our many exciting and rewarding career opportunities. Additionally, we offer many opportunities that do not require an advanced education.

We appreciate your interest in our company. If you are interested in applying for a job, please click "Apply" above, create an account, and fill out our application.

Auto-Owners Careers
- Accountant
- Actuary
- Attorney
- Automation Support
- Business Analyst
- Claims Representative
- Information Technology
- Loss Control
- Marketing Representative
- Software Quality Analyst
- Underwriter

Other Opportunities
- Clerical
- Document Processing
- Graphic Arts
- Maintenance
- Policyholder Services
- Premium Collections
- Secretarial
- Warehouse
Screen Mockup: Recruiter System - Login Page/ Recruiter Actions Page
Screen Mockup: Recruiter - Events Page

Michigan State Career Fair

**Details**
- **When:** September 30th, 2015, 2-6pm
- **Where:** 534 Birch Rd, East Lansing, MI 48823
Screen Mockup: Recruiter- University Page

<table>
<thead>
<tr>
<th>Auto-Owners</th>
<th>Candidates</th>
<th>Events</th>
<th>Universities</th>
<th>To-do List</th>
<th>Admin</th>
<th>Search</th>
<th>Submit</th>
<th>Logout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities</td>
<td>Sort By</td>
<td>Michigan State University</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ohio State University</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Michigan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Michigan State University

<table>
<thead>
<tr>
<th>Information</th>
<th>Attendees</th>
<th>Notes</th>
<th>Total Costs</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>First Name</td>
<td>Last Name</td>
<td>Major</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Mark</td>
<td>Otto</td>
<td>Computer Science Engineering</td>
<td>Active</td>
</tr>
<tr>
<td>2</td>
<td>Jacob</td>
<td>Thornton</td>
<td>Business</td>
<td>Hired</td>
</tr>
<tr>
<td>3</td>
<td>Larry</td>
<td>Green</td>
<td>Accounting</td>
<td>Declined</td>
</tr>
</tbody>
</table>

Recent Candidates:
- Gauthier Devolder: September 15th, 2015
- John Snow: September 14th, 2015
Screen Mockup: Recruiter To-do List Page
Technical Specifications

• Programming Languages: JavaScript, SQL
• Responsive Web Technology: HTML5, CSS3, Bootstrap
• Frontend MVC framework: AngularJS
• IDEs: WebStorm
• Servers: Ubuntu
• Design Technologies: Pinegrow Web Designer, Microsoft Visio
System Architecture

Auto-Owners Insurance

Auto Owner HR Recruit system
Architecture

Visual Layer
- HTML5
- CSS3
- Bootstrap

Browser
- Desktop
- Mobile
- Tablet

Interactive Control
- AngularJS

Server Layer
- Express
- Node.js

HTTP Request
- static files
- API
- JSON

Data Layer
- Raw Data
- Query
- MySQL
System Components

• Hardware Platforms
  ▪ Server: Ubuntu
  ▪ Client: Desktop/Mobile Device/Tablet with modern browser

• Software Platforms / Technologies
  ▪ Database: MySQL
  ▪ Backend: Node.js + Express
  ▪ Frontend: AngularJS + Bootstrap
  ▪ Version Control & CI: GitHub + Travis.Cl + JUnit
Testing

- Unit Testing
- JUnit
- Refactoring
- Asynchronous code testing
- Debugging
Risks

• Responsive Design
  ▪ Making a responsive design can be challenging to take into account old browsers, different resolutions and support both desktop and mobile devices.
  ▪ Mitigation: Research available examples on the web, consult other developers on where to find useful information.

• Data Storage
  ▪ The ability to store multiple types of data in our database such as video, text, word documents, PDF files.
  ▪ Mitigation: Research different options available to us when it comes to storing the data for our application.

• User Interface & User Experience
  ▪ Design a user-friendly UI for both the applicant and recruiter, communicate properly with our clients to sketch out a suitable layout.
  ▪ Mitigation: Make sure we have a proper UI/UE design before implementation, research other designs, iterate, testing.

• Reliability
  ▪ Ensure the data is persistent and reduce bugs by thoroughly testing each part of our application.
  ▪ Mitigation: Unit testing, having a specific tester, letting our clients test our application and getting feedback for improvements.