Software Design and Development

Applicant Tracking System

Client
Mosaic Learning - Carol Curley

Team 5 “Agile, Handle with Care”

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10/25/2017

Applicant Tracking System
System Design Document

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1. Introduction

1.1 Purpose of This Document

This document is designed to explain the features of the applicant tracking application, its functions, and its required conditions to operate. The intended audience is the Mosaic Learning development team as well as the faculty customer, Carol Curley.

1.2 References

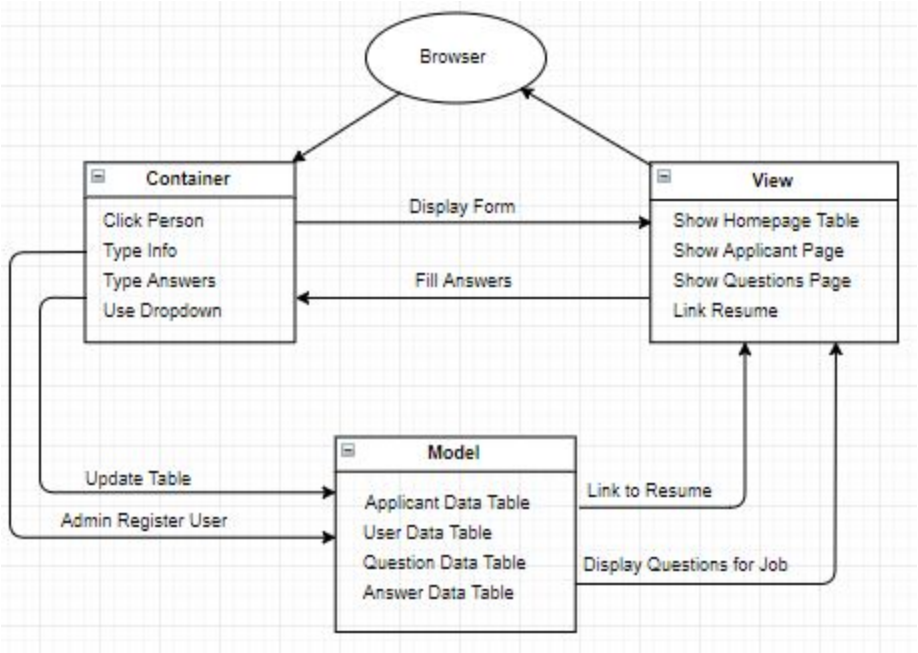
SmartDraw for Use Case Diagram

"Flowchart Maker Floor Plan Maker Org Chart Maker Diagram Maker." SmartDraw - Create Flowcharts, Floor Plans, and Other Diagrams, www.smartdraw.com

2. System Architecture

2.1 Architectural Design

Applicant Tracking System Component Diagram



The Applicant Tracking System application will be built using JavaScript. This will follow the Model View Controller architecture, which includes Models, Views and Templates.

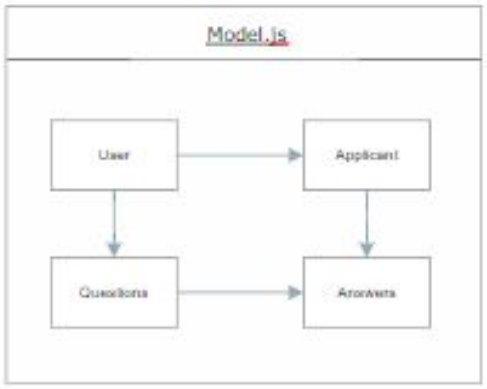
The model layer contains classes that refer to a specific database respectively. All data used in our application will be represented by a model, with the actual data existing in a

database. Model classes describe user data this data includes: user information, applicant information, and interview question information. These will be described in more details later in this document.

Templates are the specific pages served to the user. Templates are made up of html files. The templates used in this application will be described more fully in the User Interface Design Document.

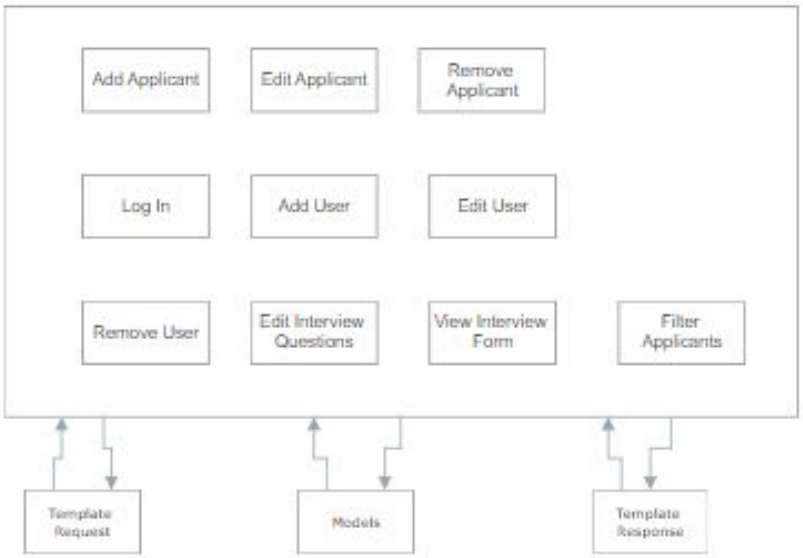
The views are a layer of abstraction between the model and template layers. A view, or the controller in MVC, is a function which takes input and returns output to the user through the template layer. A view is a use case between the user and the application. A view would interact with a model class, then either return data, or perform operations on data and return the results. Views in this application include adding, removing, editing an applicant or user, logging in, editing an interview question, viewing the interview form and filtering applicants.

2.2 Decomposition Description



Each model is a database that is filled up as the application is used. When a user creates a new applicant an entry is created in the applicant database that fills in the fields: status, decision, full name, source, location, job title, phone screen, interview, salary and resume. When the admin creates a user an entry is created in the user database that fills in the fields: email, password, first name, last name and job title. The questions database is filled when the admin creates new interview questions. The answers database is filled by the interviewer after their interview with the applicant.

Applicant Tracking System View Decomposition Diagram

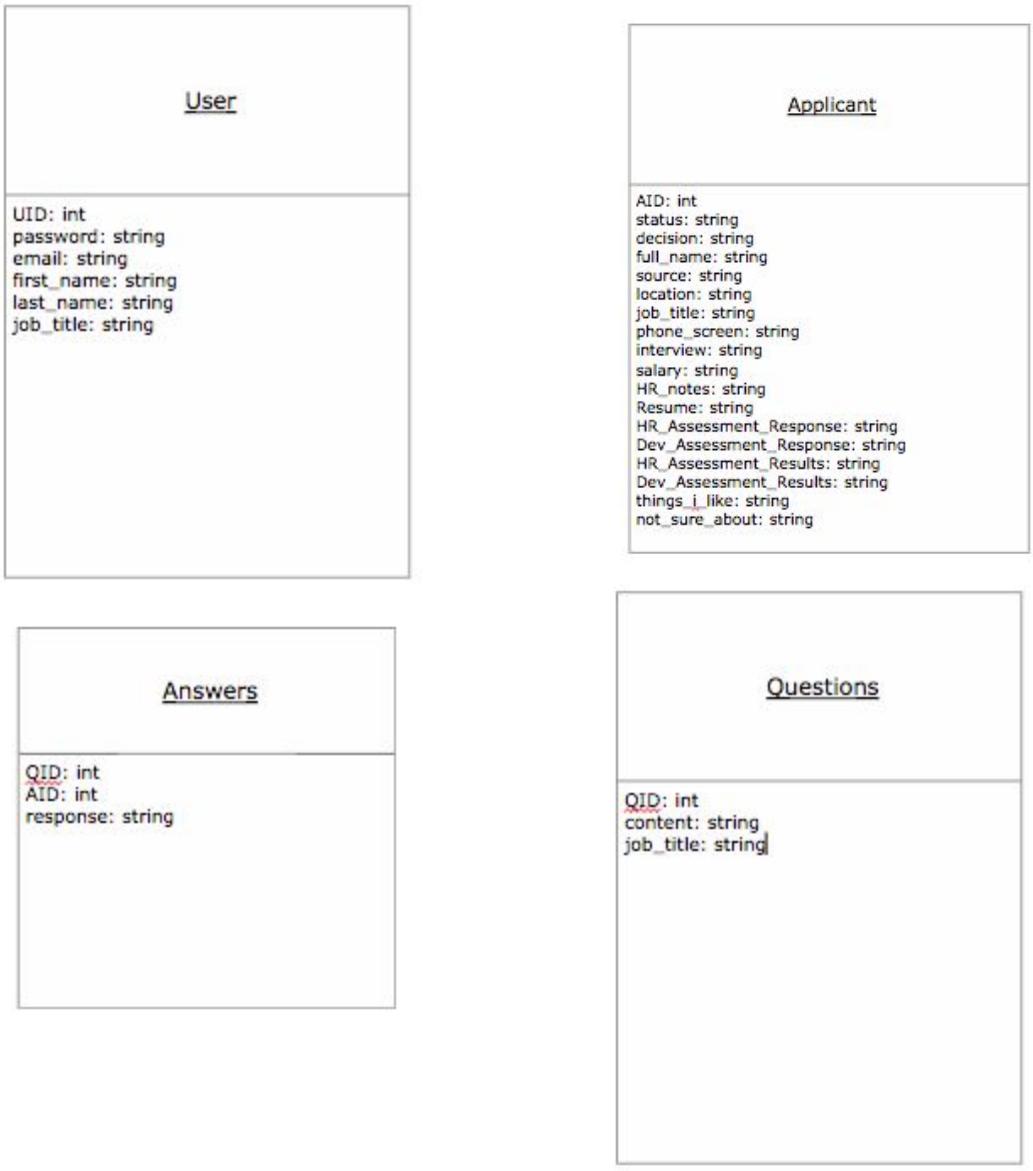


Each view is a JavaScript function which takes an HTTP request and returns an HTTP response. The “Add Applicant” function allows the user to input information into relative fields and inserts the applicant as a row in the applicant data table. The “Edit Applicant” function allows the user to choose a pre-existing row in the applicant data table and update the information in that row/field. The “Remove Applicant” function allows the user to choose a pre-existing row in the applicant data table and deactivate it. The “Login” function requests the user to input their login credentials and compares the username and password to the data in the user data table to see if matches an entry in a unique row and logs them in as that user. The “Add User” function allows a user with admin-level access to input login information into their respective fields and inserts the user in the user data table. The “Edit User” function allows a user with admin-level access to choose a pre-existing row in the user data table and update the login information for the row/field. The “Remove User” function allows a user with admin-level access to choose a pre-existing row in the user data table and deactivate it. The “Edit Interview Questions” function allows a user with admin level access to change, add, or remove question rows on the questions data table. The “View Interview Form” function allows user to access the the rows of the answer data table that corresponds to a specific row in the question and applicant data table. The “Filter Applicants” function returns a query result based on the user specified criteria from the applicant data table.

3. Persistent Data Design

3.1 Database Descriptions

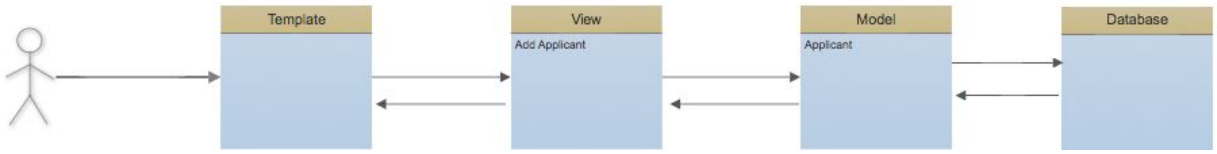
All databases are kept in an SQL schema. The schema for these databases are modeled below:



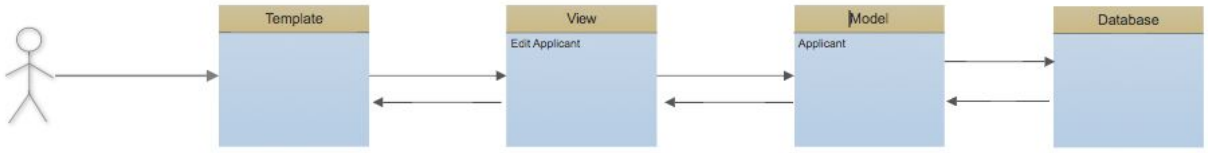
4. Requirements Matrix

Please refer to the System Requirements Specification for details regarding the corresponding use cases.

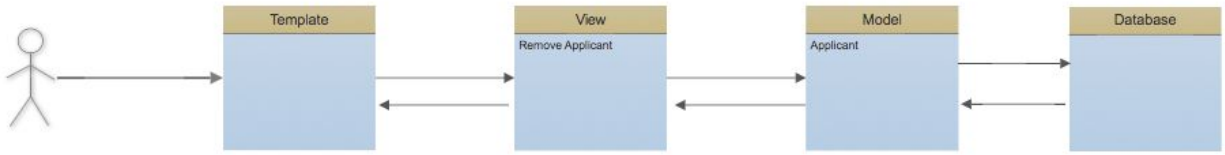
Add Applicant: Use Case #1



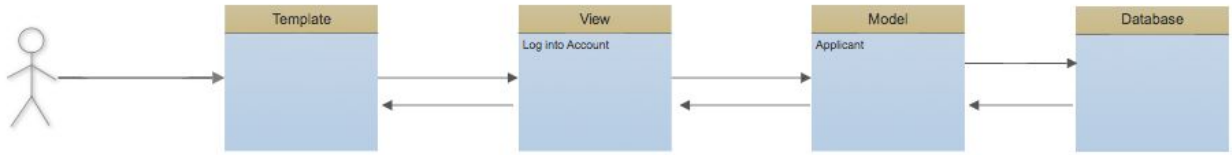
Edit Applicant: Use Case #2



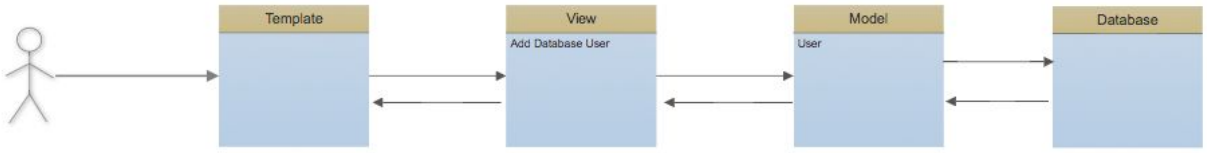
Remove Applicant: Use Case #3



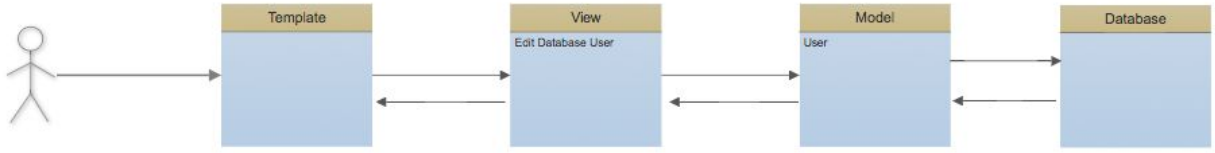
Log into Account: Use Case #4



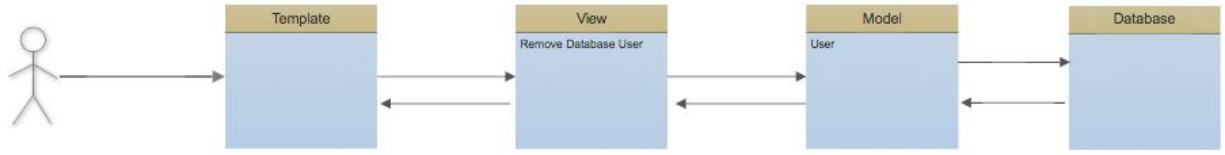
Add Database User: Use Case #5



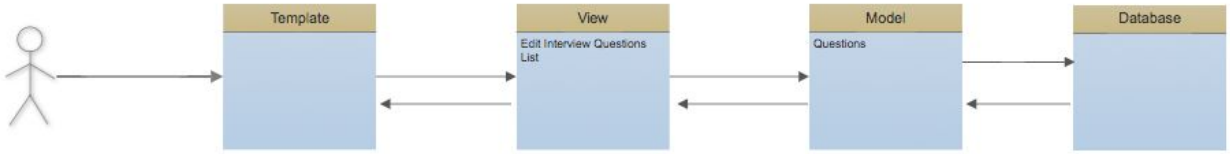
Edit Database User: Use Case #6



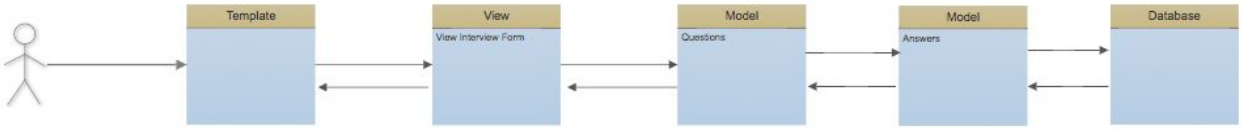
Remove Database User: Use Case #7



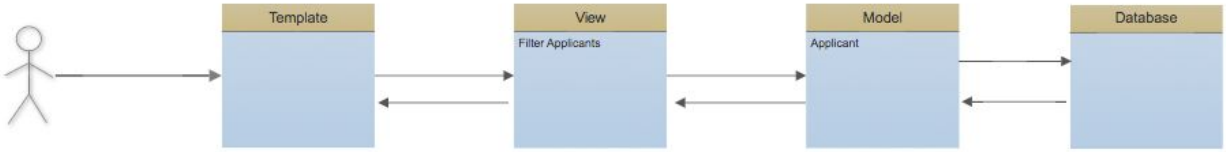
Edit Interview Questions List: Use Case #8



View Interview Form: Use Case #9



Filter Applicant: Use Case #10



5. Appendix A – Agreement Between Customer and Contractor

Customer finds this *Applicant Tracking System* acceptable and agrees to use our database system to search, review, and edit applicant records. Use cases are included above in the functional requirements section of the behavior between the system and user. Additional features will be provided in further development phases. When and if future changes to this document occur a drafted new document will be created. Both a hard and electronic copy of both versions will be presented to the client for review. Upon approval, the draft will be finalized and signed off by both parties. This agreement may be terminated immediately by providing written notice

Client

Name: Carol Curley

DocuSigned by: Carol Curley 23629990DB54486...

Signature

Date: 10/25/2017 | 16:40 PM EDT

Name: _____

_____

Signature

Date: _____

Team

Name: Brian Wilson

DocuSigned by: Brian Wilson E82CF307B59D402...

Signature

Date: 10/25/2017 | 15:14 PM EDT

Name: Arvin Siva

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Date: 10/25/2017 | 15:14 PM EDT

Name: Logan Rites

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Name: Steven Hargrove

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Name: James Baker

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Name: Vihar Patel

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Date: 10/25/2017 | 15:14 PM EDT

6. Appendix B – Team Review Sign-off

All team members have reviewed this document and agree on both the content and the format. Any concerns are addressed in team comments below.

Name: Brian Wilson

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Brian Wilson
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Signature

Date: 10/25/2017 | 15:14 PM EDT

Comments: _____

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Name: Arvin Siva

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Date: 10/25/2017 | 15:14 PM EDT

Comments: _____

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Name: Logan Rites

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Name: Steven Hargrove

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Date: 10/25/2017 | 15:14 PM EDT

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Name: James Baker

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James Baker
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Signature

Date: 10/25/2017 | 15:16 PM EDT

Comments: _____

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Name: Vihar Patel

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Vihar Patel
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Signature

Date: 10/25/2017 | 15:14 PM EDT

Comments: _____

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7. Appendix C – Document Contributions

This document was written over the course of many group meetings. The graphics were done by Brian Wilson, Vihar Patel, and James Baker. Logan Rites, Steve Hargrove, and Arvin Siva split up the writing of the document. As the project was modified per suggestions from the client, various team members were consulted on their specific sections in order to produce the sections in this document.