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| http://4.bp.blogspot.com/-SotLIkzmscA/UqQLE9BjdPI/AAAAAAAAARc/-SF46qFfVE0/s1600/daffodil-international-university-logo.png  Object Oriented Software Development  SWE331 | | | | | | | | |
|  | | | | | | | | |
| Employment Application Review System | | | | | | | | |
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| Faculty of Science and Information Technology | | | | | |
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| December 2017 | | | | | | | | |

**Final Approval**

A dissertation submitted to the Department of Software Engineering, Daffodil International University in partial fulfillment of the requirement for the Object Oriented Software Development of Bachelor of Science in Software Engineering.

**Dedication**

Heroes of 1971

**Acknowledgement**

Professor S. Xu

Md. Alamgir Kabir

**Project in Brief**

Project Title: Employment Application Review System

**Undertaken by:**

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ID: 151-35-920

**Supervised by:**

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Date Started: October 2017

Date Completed: December 2017

Operating System: Microsoft

**Abstract**

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**Chapter 1**

Introduction

# Introduction

## About the System

EARS is an intranet-based Employment Application Review System. The system is designed so that school faculty members can review applicants and collaborate asynchronously in order to find the best applicant for a given job opening. This system reduces the overhead of the process and lightens the workload for the search chairperson

## Purpose

To find the best applicant for a given job opening. This system reduces the over head of the process and lightens the workload for the search chairperson

## Scope

Faculty members can review applicants and review their posts .And EARS helps to find out the best applicants.

## Vision

Make an easy and smart solution for the applicant selection.

## Why this system is necessary?

EARS is an online based system. Here applicants post their resumes and simply the faculty members review them. According to their review they can find out the best applicants. It’s an easy and smart way to find out the best applicants.

## Proposed Solution

EARS make the top reviewed applicants list in ascending order. The faculty members just review them and the list of the applicants made automatically by following the reviewed order.

# 

Chapter 2

**System Analysis**

# System Analysis

## Use Case Model

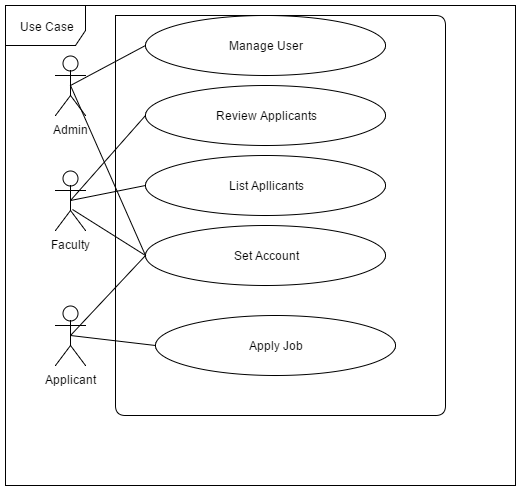


Figure Use Case Model

## Actor Goal List

|  |  |
| --- | --- |
| **Actor** | **Goal** |
| Admin | Manage Users |
| Applicants | Apply for Job  Manage His Own Account  See Reviews |
| Faculty | Review Applications  Manage List of Applications  Manage His Own Accounts |

## Use Case Description (Brief)

### Manage Users

An admin can add a faculty or applicants and he can delete their account. He can update faculty information and applicant’s information.

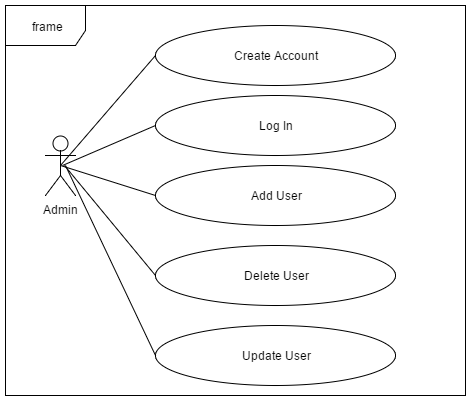


Figure Use Case for Manage User

### Review Applicants

Here faculty review the applicant’s posts according to their posts. Faculty selects their desired applicants by reviewing their posts.

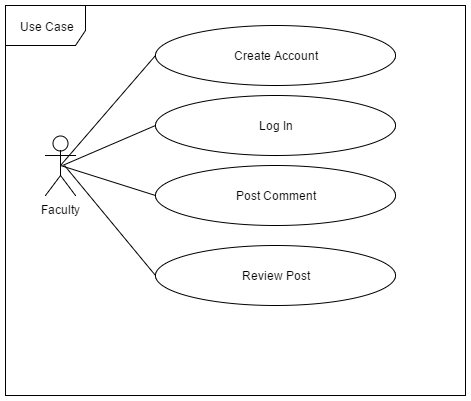


Figure Use Case for Review Applicants

### List Applicants

According to faculty review they make list of the applicants. And the list made by the given reviews.

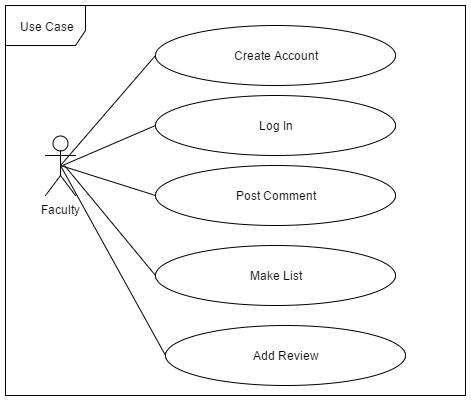


Figure Use Case for List Applicants

### Set Account

Almost every actor of the system need to set their account .Every account need a registration for accessing their account .After completing their registration all three account have a login access. Remember that one email can register an account. All three actor have an individual email account by the authority.

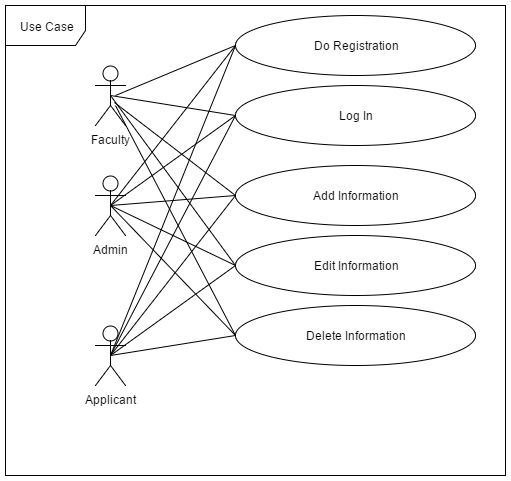


Figure Use Case for Set Account

### Apply Job

This use case for the applicant’s only .An applicant’s needs to drop his cv’s. So by this he can drop his post mentioned as cv. Applicant post are reviewed by the faculty. Applicant see their posts status. And he can the reviews.

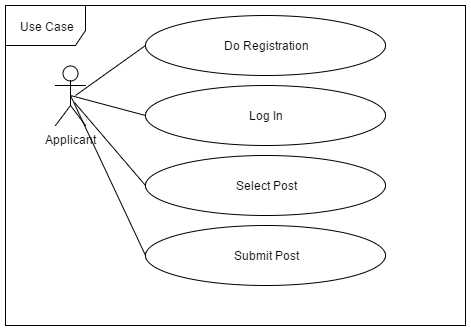


Figure Use Case for Apply Job

## Use Case Description (Detailed)

### Manage Users

|  |  |
| --- | --- |
| **Topics** | **Details** |
| ID | 1 |
| Name | Manage Users |
| Primary Actor | Admin |
| Secondary Actor | User |
| Goal | Admin manages the user |
| Pre-Condition | Every user must need a valid id, password and authorized from authority |
| Post Condition | Admin allowed users for next steps like posting and reviewing |
| Main Success Scenario | * 1. User needs a verified account   2. Admin collect the database and sent to the authority   3. Admin can’t edit update to every option. Only for specific fields   4. If some change occurred ,user must be notified |
| Scenario Extension | * 1. User input invalid id or password   2. Admin allows something without authority permission   3.1 Admin change some confidential data of the user  4.1 User not notified about his update |

### Review Applicants

|  |  |
| --- | --- |
| **Topics** | **Details** |
| ID | 2 |
| Name | Review Applicants |
| Primary Actor | Faculty |
| Secondary Actor | User |
| Goal | Manage the user |
| Pre-Condition | Applicant post their applications |
| Post Condition | Have a status after faculty review |
| Main Success Scenario | * + 1. Faculty Login their account     2. View applicants profile for review     3. Post comments on applicants post and review him     4. Update applicants status |
| Scenario Extension | * 1. Failed to login the system   2. Not a valid faculty account   3. System failure so they can’t view applicants profile   4. Faculty not post a comment   5. Comment posted but status not updated |

### List Applicants

|  |  |
| --- | --- |
| **Topics** | **Details** |
| ID | 3 |
| Name | List Applicants |
| Primary Actor | Admin |
| Secondary Actor | Applicant |
| Goal | Admin made a list of the applicants |
| Pre-Condition | Application should submitted |
| Post Condition | List are made for the applicants |
| Main Success Scenario | * + 1. Applicants post their applications     2. Faculty comments are posted     3. Review confirm     4. List of the eligible applicants are made |
| Scenario Extension | * 1. No application are posted   2. Invalid applications   3. Faculty not commented in the post   4. Faculty not reviewed the applications   5. Due to system failure some review are post later |

### Set Account

|  |  |
| --- | --- |
| **Topics** | **Details** |
| ID | 3 |
| Name | Set Account |
| Primary Actor | Admin |
| Secondary Actor | Admin |
| Goal | Admin will manage accounts |
| Pre-Condition | System admin must be logged in to manage the account. |
| Post Condition | Admin provide information to the authority |
| Main Success Scenario | * 1. System user must need log in   2. System admin will confirm the applicant information.   3. System admin will provide the information to the authority. |
| Scenario Extension | * 1. System user not logged in.   2. Applicant give wrong information   3.1 Admin can’t confirm information |

### Apply Job

|  |  |
| --- | --- |
| Topics | Details |
| ID | 5 |
| Name | Apply Job |
| Primary Actor | Applicant |
| Secondary Actor | Admin |
| Goal | Apply for the job |
| Pre-Condition | He should be qualified for the post. |
| Post Condition | Reviewed and see name in the list |
| Main Success Scenario | 1. Applicant should meet the requirements for the post 2. Create an account for applying the job 3. Post in proper way 4. Approved by admin |
| Scenario Extension | * 1. Requirement are not meets   2.1 Not logged in  2.1 False information input  3.1 Doesn’t post in the correct pole   * 1. Admin denied profile for not posted in proper way. |

## System Sequence Diagrams

### Manage Users

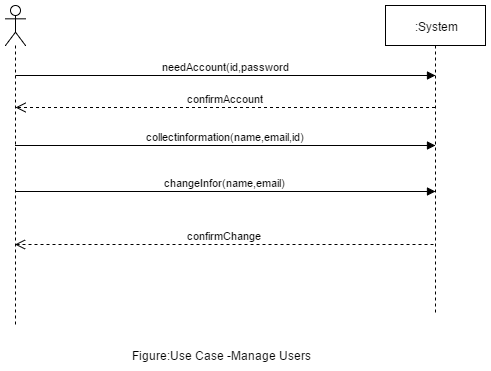


Figure SSD for Manage User

### Review Applicants

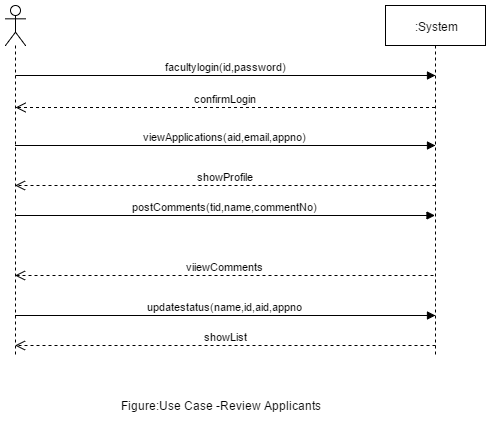


Figure SSD for Review Applicants

### List Applicants

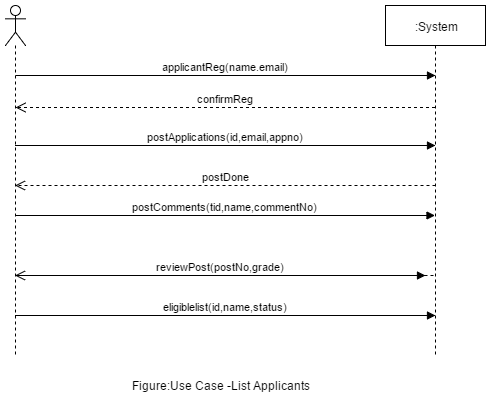


Figure SSD for List Applicants

### Set Account

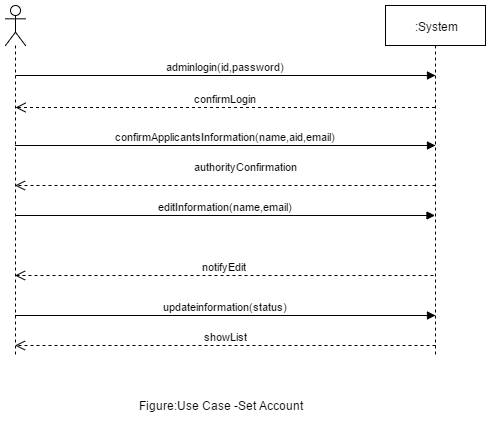


Figure SSD for Set Account

### Apply Job

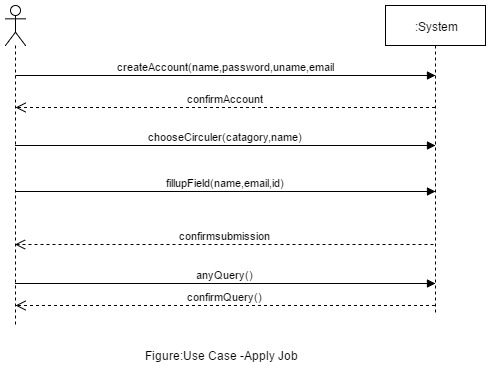


Figure SSD for Apply Job

## Domain/Conceptual Model

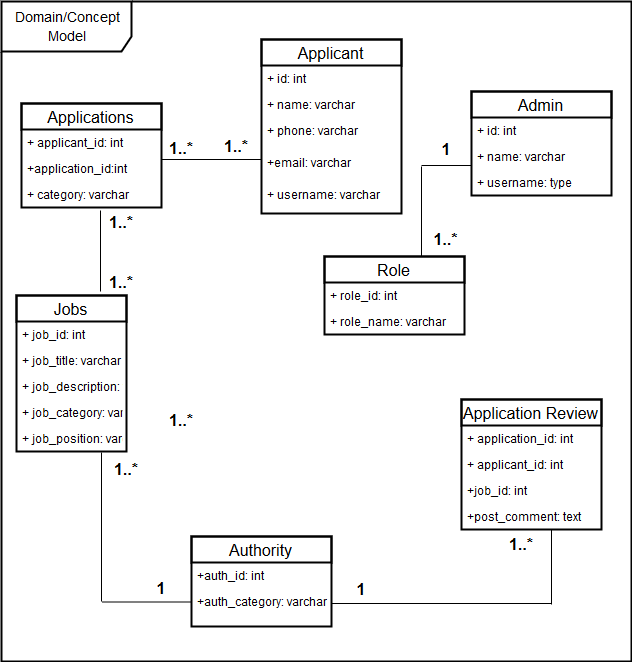


Figure Domain Model for EARS

## Activity diagram

Activity diagrams are graphical representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency.

In the system workflows starts from the stage when an applications enters the area of Federal Shariat Court i.e. uploaded in the system to last activity that is a judgment comes or the case is dismissed .This whole process is shown in the below diagram.

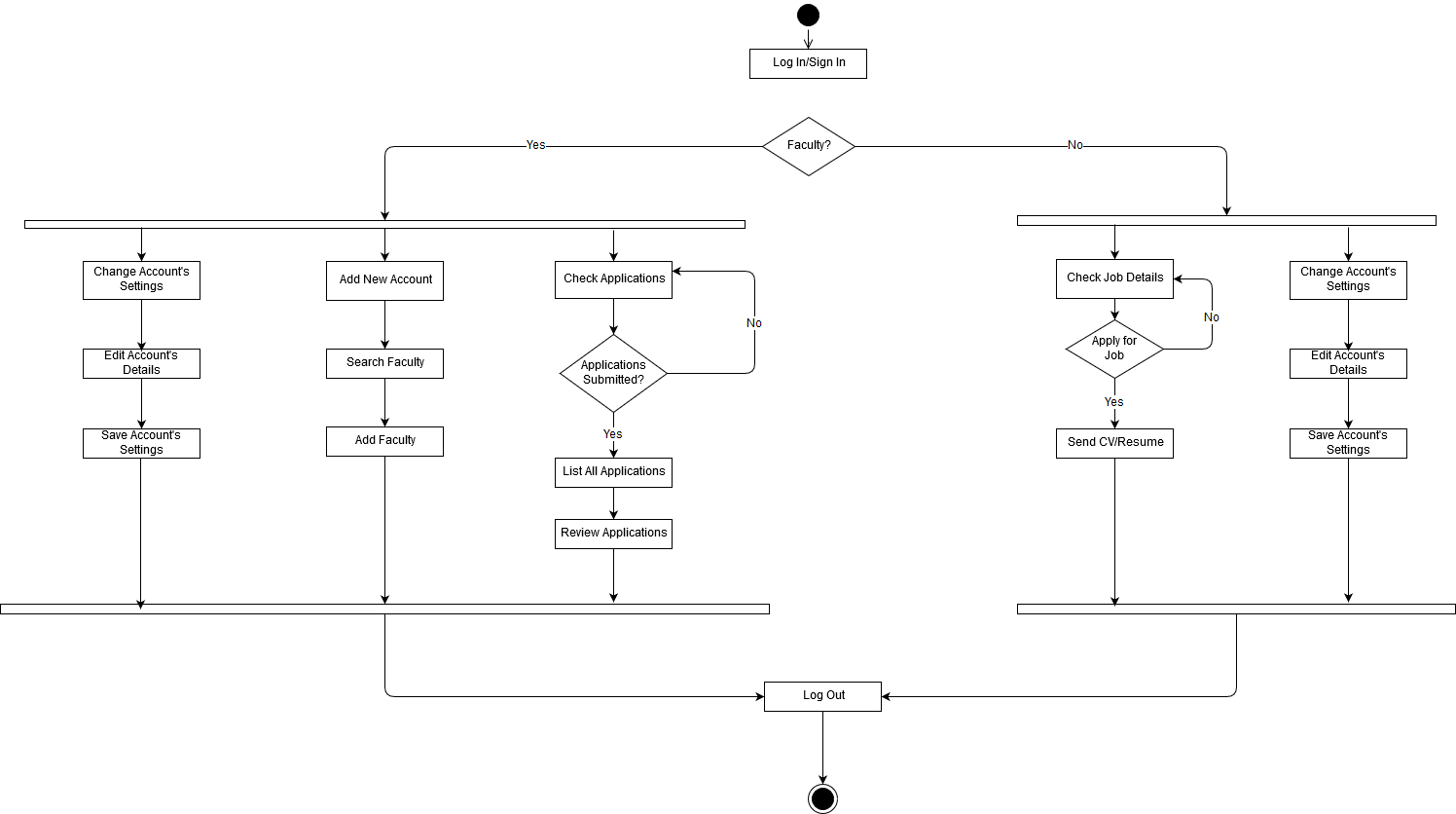


Figure Activity Diagram for EARS

Chapter 3

**System Design**

# System Design

Design is a process that uses the product of analysis to produce a specification for implementing a system. Design is the logical description of how a system will work.

Design emphasizes a conceptual solution that fulfills the requirements, rather than its implementation. For example, a description of a database schema and software objects. Design ideas often exclude low-level or "obvious" details obvious to the intended consumers. Ultimately, designs can be implemented, and the implementation (such as code) expresses the true and complete realized design. The term is best qualified, as in object-oriented design or database design.

## Sequence Diagrams

The UML includes interaction diagrams to illustrate how objects interact via messages. They are used for dynamic object modeling. The term interaction diagram is a generalization of two more specialized UML diagram types:

### Set Account, Manage User

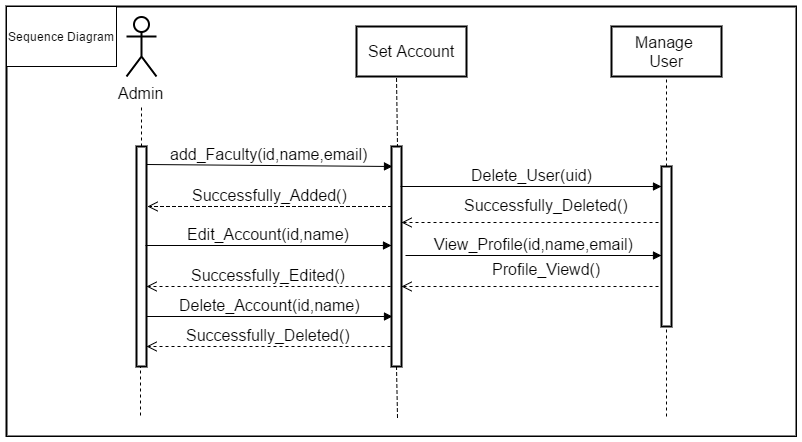


Figure SD for Admin

### List Application, Review Applicant, Set Account

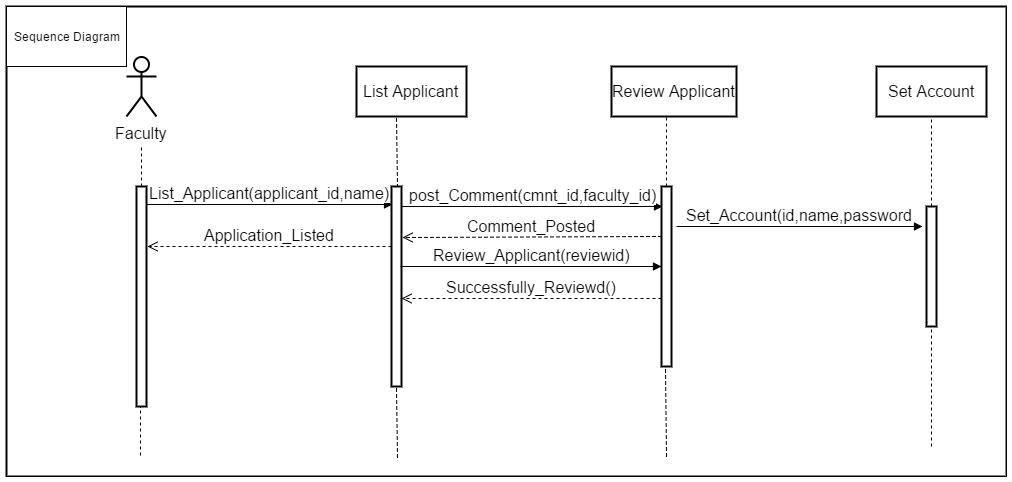


Figure SD for Faculty

### Apply Job, Set Account

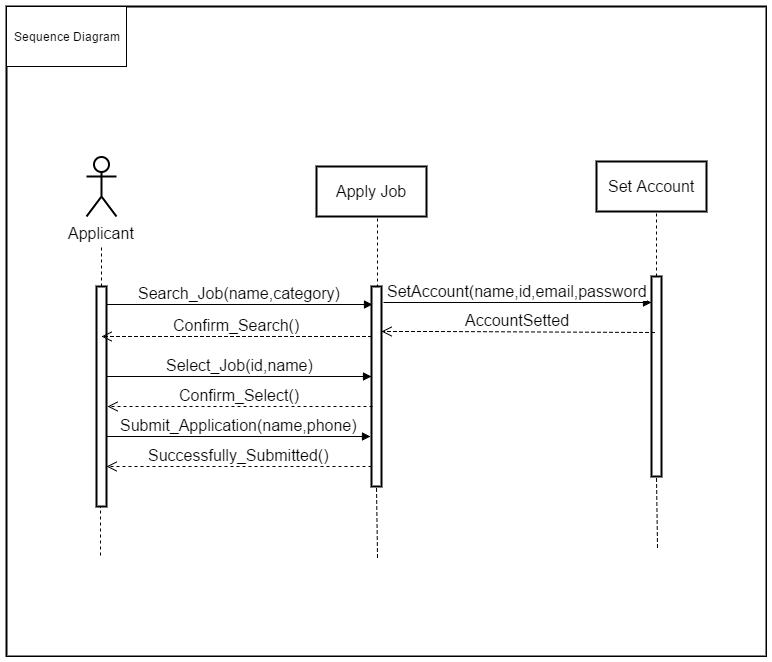


Figure SD for Applicants

## Class Diagram

Class or structural diagrams define the basic building blocks of a model. They are used for static object modeling, describing what attributes and behavior it has rather than detailing the methods for achieving operations.

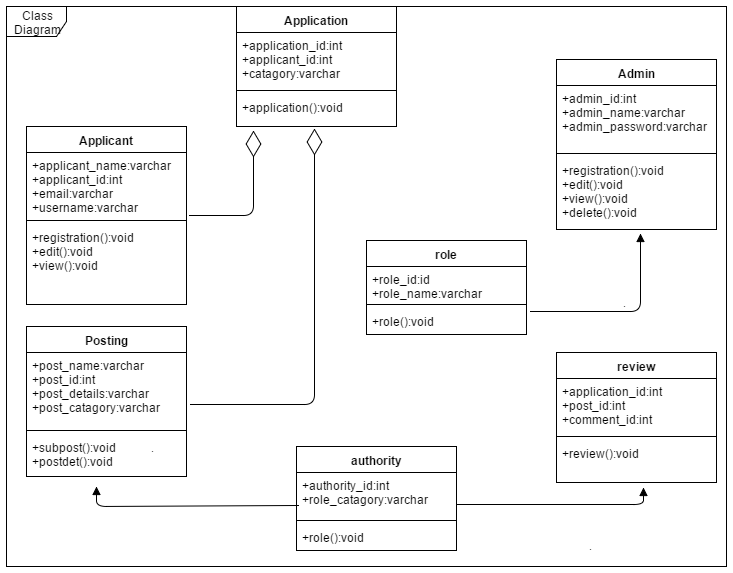


Figure Class Diagram for EARS

## Entity Relationship Diagram

An entity-relationship model is an abstract and conceptual representation of data. Entity-relationship modeling is a database modeling method, used to produce a type of conceptual schema or semantic data model of a system, often a relational database, and its requirements in a top-down fashion. Diagrams created by this process are called Entity-Relationship Diagrams.

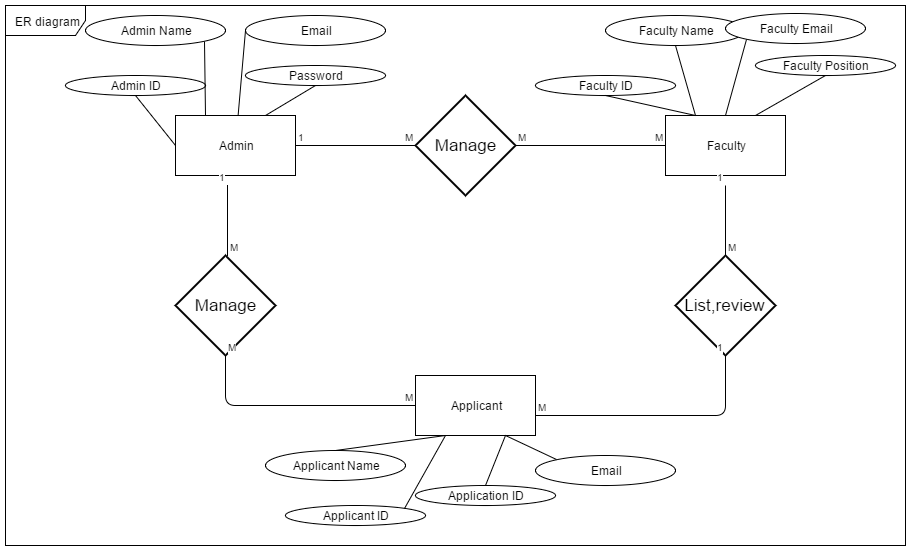


Figure ER Diagram for Ears

Chapter 4

**Implementation**

# Implementation

Implementation (software) perspective describes software implementations in a particular technology (such as C#). In the UP, Implementation means programming and building the system, not deploying it.

In the implementation phase, the developer builds the components either from scratch or by composition given the architecture document from the design phase and the requirement document from the analysis phase. The architecture document should give guidance. Sometimes, this guidance is found in the requirement document. The implementation phase deals with issues of quality, performance and debugging. The end deliverable of implementation phase is the product itself.

## Tools &Technologies

* Sublime Text
* HTML5
* CSS3
* JavaScript
* Bootstrap
* JQuery

## Project Link

They provide github repository link after uploading the project there.

Chapter 6

**Conclusion**

# Conclusion

## Good Features of the System

Employment Application Review System is for reviewing applications. Here a list of selected candidate made automatically.

## Limitations of the System

A few user can use this system.

## Future Enhancements

In future we add a feature where an email will sent to the selected applicants. It will found in android and iOS in later.

The End