Company Scheduler

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1. Introduction

In our experience, working at multiple companies who made schedules manually has always led to some sort of miscommunication that created a schedule which contradicts some employees' availability. There was also the chance that a schedule could come out late because the employer didn't have enough time to complete it. This causes a kind of hate and frustration between employees and the employer who created the incorrect schedule. Scheduling may be tedious and bothersome, as well as inefficient for larger companies with thousands of employees. This software would be able to be used by any company that needed a scheduling software in order to ensure that schedules are made correctly.

2. Proposed System

Moving forward, this software would help companies automatically create a schedule for their employees without the hassle of doing it manually. This would allow more time for the previous manual schedulers to do other tasks while also decreasing miscommunication and errors in scheduling. It would increase productivity and efficiency for the employers as they wouldn't have to waste time manually checking their employees' availability to make a schedule.

The project will have two log-in types, admin(employer) and user(employee). As an admin you will be able to enter each employee's name into the system, their available work days and hours. Admins will also be able to set a max amount of work hours per week per employee, as well as accept or decline requests from employees for days off and vacation time. As a user you are able to view only your schedule for the week, you also have the option to request days off, a decrease in hours, availability change and a schedule shift switch. There will also be a list of usernames and passwords saved for each employee so they can log in.

2.1 Functional Requirements

IN001 – The system shall allow both an employee and employer to log in, respectively, given that they have a valid username and password

IN002 – The system shall retrieve the schedule of an employee given the employee's full name

IN003 – The system shall allow for changes to be made to an employee's schedule given the employee's full name

IN004 – The system shall allow for an employee to input/change their availability, and that change should be reflected in the database for employers to see

IN005 – The system shall allow for an employer to add an employee, given that they input their full name, date of birth, email, phone number, availability, employee-type, address, and assign them a username and password.

IN006 – The system shall allow for an employee to request time/days off given that they input valid dates to request off.

IN007 – The system shall allow for an employer to either accept or deny requests for time off given a valid employee
IN008 – The system shall allow an employer (admin) to create a new schedule for a given employee
IN009 – The system shall allow for an employer to input/set a maximum number of hours a week that an employee may work
IN010 – The system shall allow for an employer (admin) to remove a valid employee from the database.
IN011 – The system shall allow for an employer to input changes to an employee's information/profile
IN012 – The system shall allow for both employers and employee to log out of the system with ease, and close the application upon signing out.

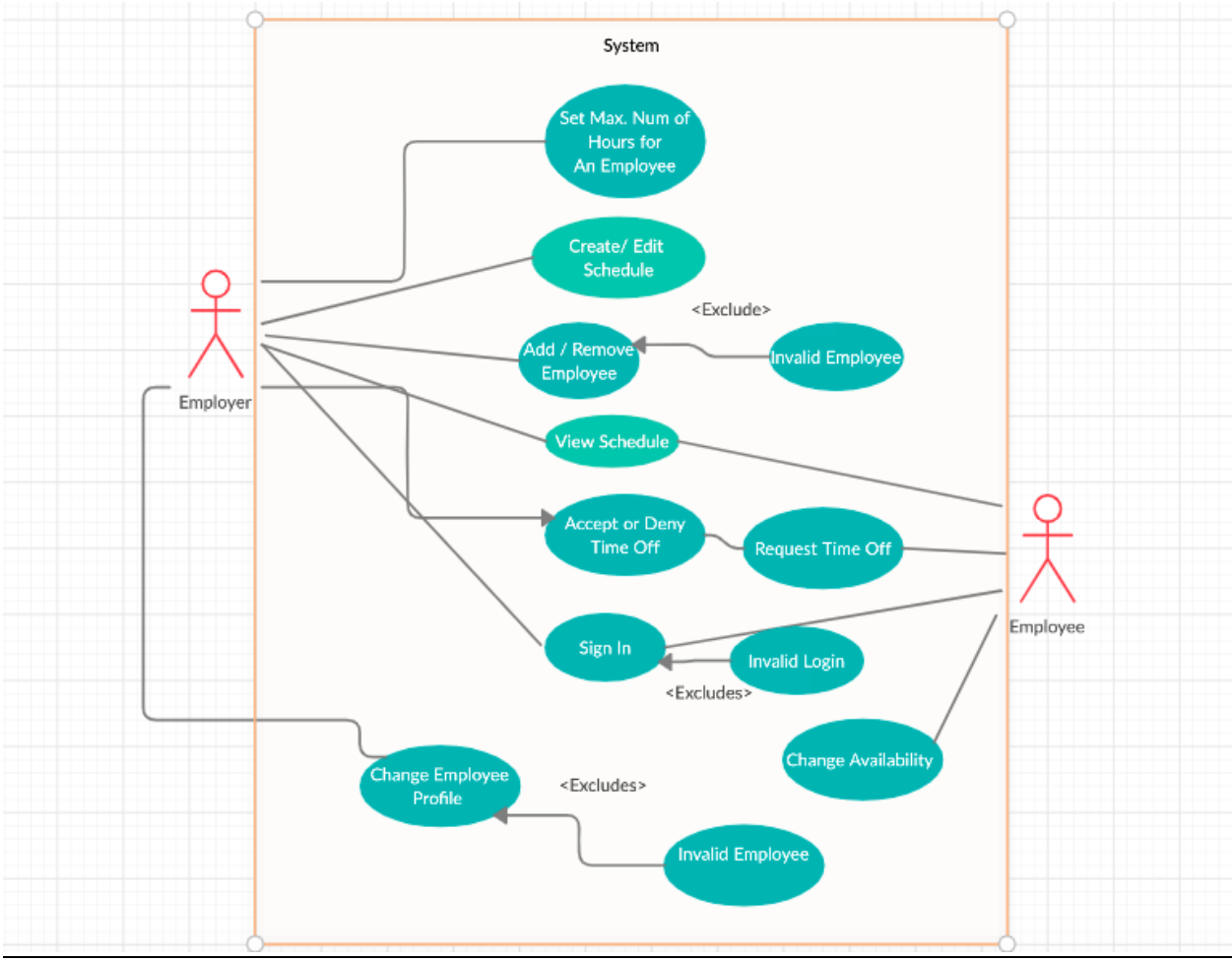
2.2 Non-Functional Requirements

IN101 – The Company Scheduler system shall be available to employers/employees 24 hours a day, 7 days a week. If there is any downtime, it shall not exceed one minute in any one day.
IN102 – The Company Scheduler should run on both MacOS as well as Windows OS.
IN103 – Any interactions between the user and the system shall not exceed 10 seconds.
IN104 – The system shall allow only employers (admins) to view all information for employees in the database
IN105 - The system date-time shall be based Eastern Standard Time in the United States of America.

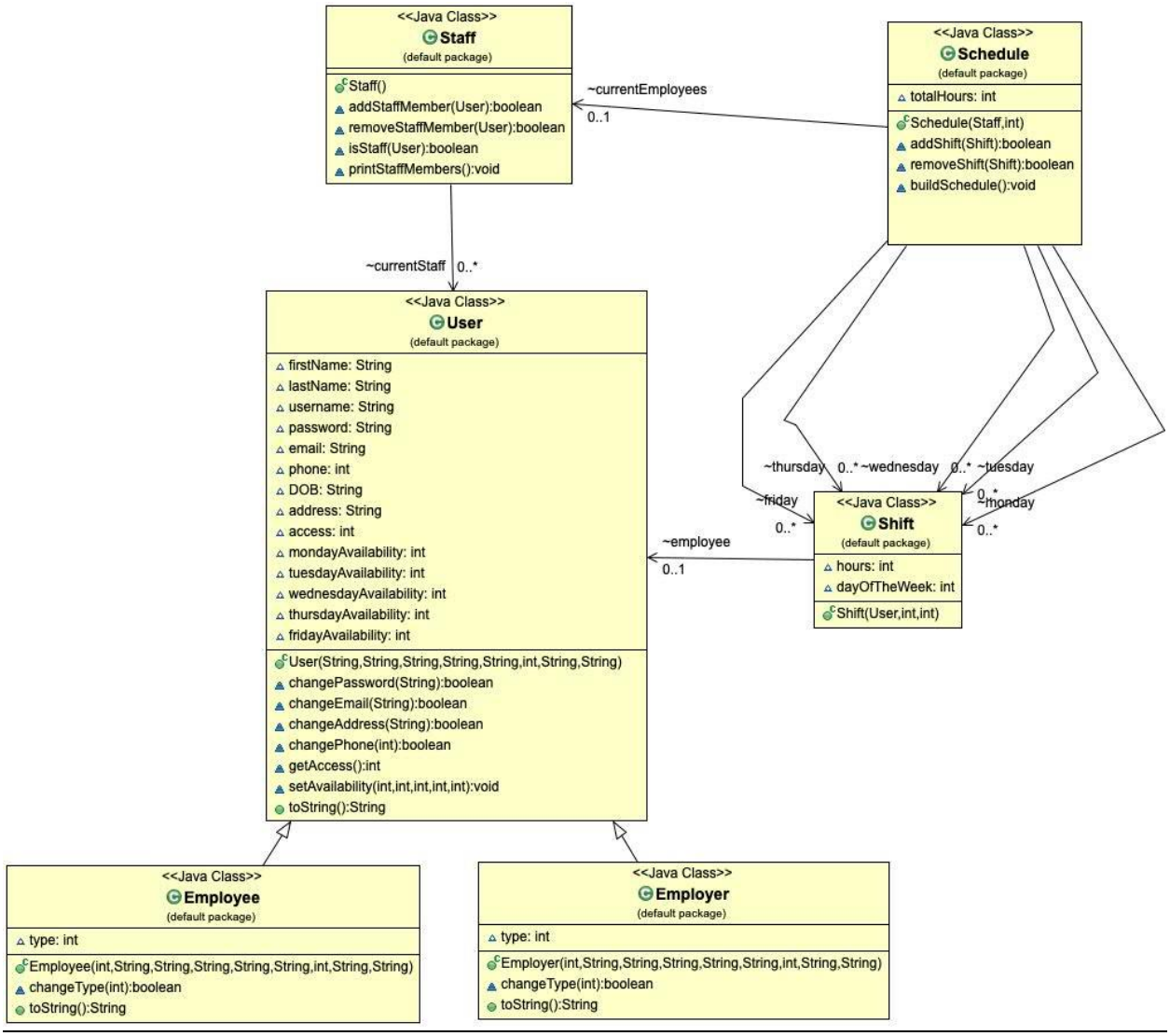
2.3 System Models

2.3.1 Use Case Diagram

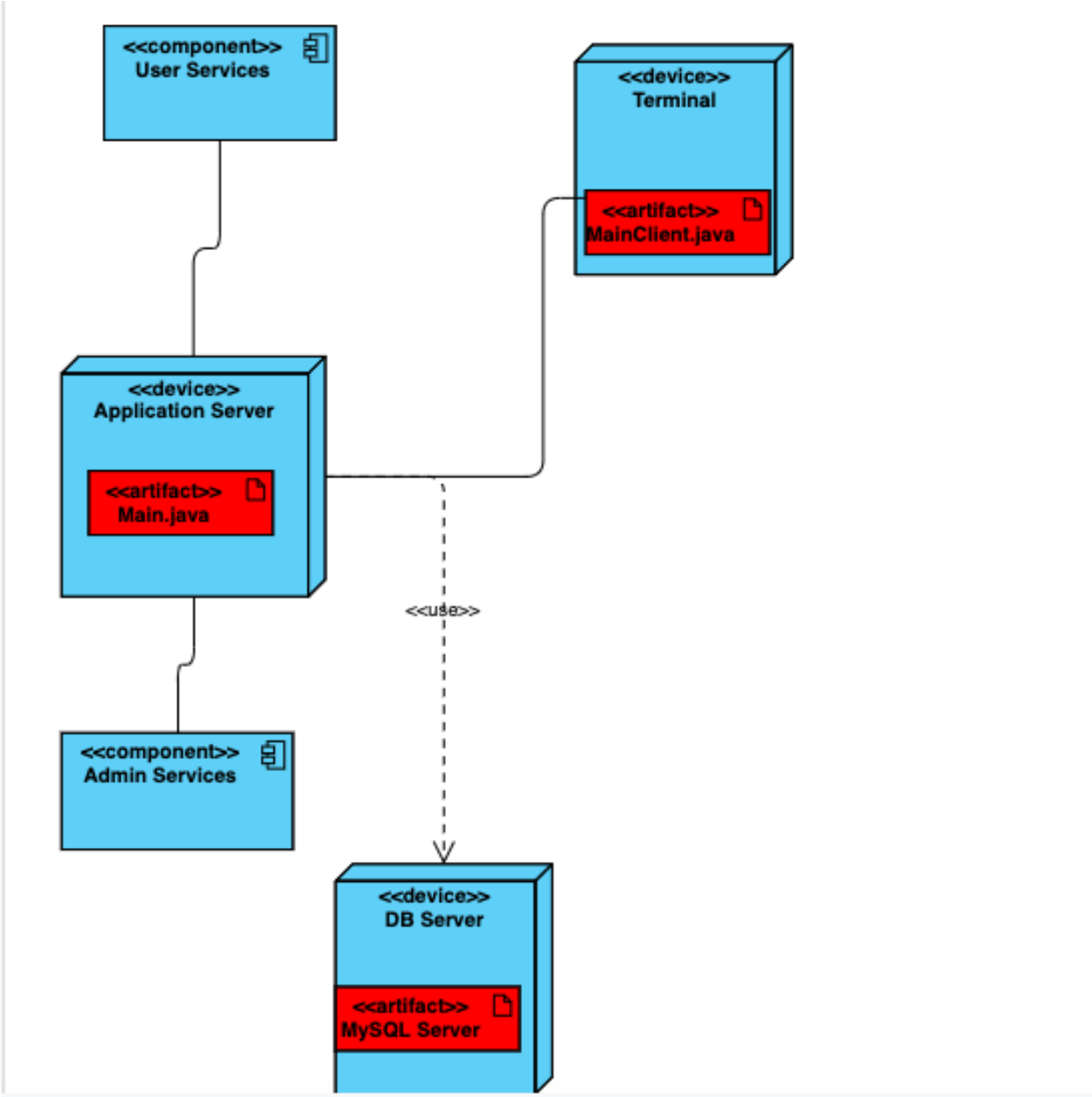
2.4



2.3.1 Class Diagram



2.3.2 Deployment Diagram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