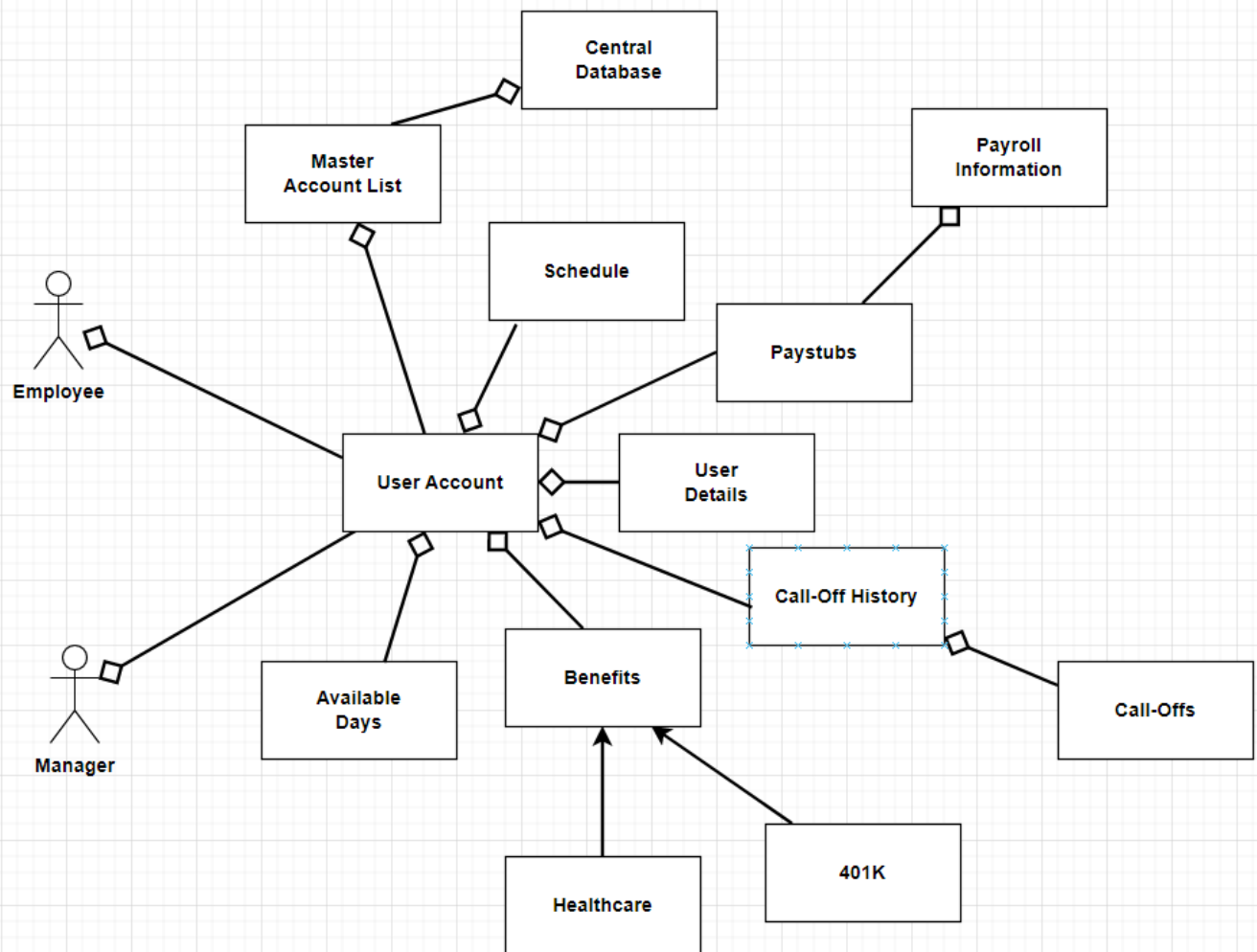**Group: Nexus**

Project: Employee Nexus

Domain Model

High-Level Requirements

1) Employee Nexus will have both a web version and an android version.
2) The web and app version must have some different functions but still complement each other.
3) The app must allow employees to view their personal information.
   a. Including available PTO, previous call-offs, paystubs, etc.
4) The app will allow employees to request time off or call out of work.
   a. It must allow employees to upload documents or images of doctor notes.
5) There must be a database in place to store all employee call-offs as well as personal information.
6) The app must have a login page for users to log on to their accounts that can be logged into using biometrics if available.
7) The app must allow for GPS based punch-ins.
   a. If biometrics are available, must confirm punch-in using biometrics as a form of signature.
8) The app must contain different permission levels for administrators.
   a. Managers must be able to alter and update employee information.
   b. The administration must be able to view all employees' payroll information.
   c. Managers can view who has called off per their corresponding level of access.
9) Employee Nexus will have a news and announcements page that displays relevant company updates or alerts.
10) Employee accounts may only be created or deleted by the employer.
    a. Accounts can be created through the app or web page.
11) Employees must be able to view their work schedule. The schedule must display 2 weeks in advance.
12) Eligible employees must be able to view their company benefits information.
    a. This includes 401k, healthcare information, and other company benefits.
13) The web page will require 2FA login that is sent to and verified by the app version.
14) The web page will host a variety of tools for employees to use.
    a. Training videos to be completed and checked for progress.
    b. Required documents to be filled out and submitted.
    c. Allow employees to submit changes to any personal information such as address or banking information for direct deposit.
    d. Select a different healthcare/401k route if available and/or upgrade current plan.
15) The web page will display current employee's work assessment based on average job statistics.
16) The web page will also display and worker's comp/safety incidents for employee's records.
17) Either the web page or app must host a bidding system for different types of positions.
    a. A list of positions, with their respective descriptions and requirements.
    b. The ability to apply for the position by submitting required information.

Use Case Diagram

Login with 2FA (by Ethan Stoner)

BASIC COURSE: On the Homepage, the user clicks the Log In button, and the system shows the Login screen. The user enters their username and password, and clicks the Login button. The system ensures that the username exists, and that the password is correct for the given username. The system then sends a message to the Authentication server, then shows a Mobile Confirmation page. The user opens the mobile application and confirms their login, and the system sends a confirmation message to the Authentication server. The system displays a Confirmation page, and then the Homepage.

ALTERNATE COURSES:

User does not have the mobile application: The system sends an e-mail message to the user's e-mail address containing a confirmation code, then shows the Confirmation Code Entry screen. The user enters the confirmation code, and the system sends a confirmation message to the Authentication server.

Username does not exist: The system displays an Authentication Error page and returns to the Login screen.

Password is incorrect: The system displays an Authentication Error page and returns to the Login screen.

User does not confirm login: The system sends a rejection message to the Authentication server, displays an Authentication Error page, and then returns to the Login screen.

User enters incorrect confirmation code: The system sends a rejection message to the Authentication server, displays an Authentication Error page, and then returns to the Login screen.

Log In

username: asdfghjk1

password: ***********

Log In

<div align="center">**Call-Off (by: John Fletcher)**</div>

BASIC COURSE:

The system displays the Call-Off page with prefilled User Information, such as Name, ID, Building, Department, and Shift. The User enters information such as Reason, Call-Off Type, and Dates, then proceeds to click the Submit button when complete. The system checks if selected Call-Off Type is available and sends Call-Off to database and notifies corresponding Management, then displays a Confirmation message that the Call-Off has been accepted.

ALTERNATE COURSES:

User has no available time to Call-Off: The system displays an Error page. The Error page displays a message stating that the User has no available time for selected type and asks User to resubmit with a different Call-off Type, then returns to Call-Off page.

User does not work Selected Dates: The system displays an Error page. The Error page displays a message stating that the User does not work the selected Dates asks User to resubmit with a different Dates, then returns to Call-Off page.

Connection is lost during submission: The system displays an Error page. The Error page displays a message stating the connection was lost to the internet, informs User to try again when connection is re-established, then returns to Call-Off page.

Call-Off

11/30/2022   ID:XXXX

Name: XXXXXXX

Building: XXX   Department: CMPSC   Shift: X

Reason :   Weather__   Illness___   Emergency___

Type: UPTO__   PTO___   Unexcused___

Dates:_____

Add Employee Account (by: Zhaokai Xie)

BASIC COURSE:

The user clicks add a new employee account Button, the system displays Add a New Employee Account Page. The user enters Account Information including the Employee's real Name, Employee ID, Email, Date of Birth, etc. The system ensures that the Employee's ID is unique by accessing Master Account List. The system then adds Employee Account to Master Account List. The system display "Succeed" and send an email to the employee's email address about the Account Information and includes a temporary password.

ALTERNATIVE COURSE:

Employee's ID already exists: The system displays the "ID already exists" message on Error Page. And displays Add a New Employee Account Page again.

Email address is invalid: The system displays the "Please enter a valid email address" message on Error Page. And displays Add a New Employee Account Page again.

Add a new employee

real name: _____

ID: _____

Email: _____

Date of birth: ___/___/_____

[Add]