Digital Walk-Around Project - Fat 6 Terms of Reference

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Project Information

Project Overview

Problem/Opportunity Statement

HSBC's workforce is 80% remote, which poses challenges for connecting coworkers. With increased reliance on collaboration tools, HSBC needs a new solution for increasing productivity online. This project will help streamline the online collaboration process by mimicking the office environment, bringing more natural office-like interactions into the virtual space.

Open Source

We plan on creating this product as an open-source project using the MIT open source license. We chose the MIT license because it has very limited restrictions on reuse and has high license compatibility, thus allowing HSBC to use our code as they feel the need to.

Goals and Objectives

Primary/Important Goals (prioritized):

- UI that shows what zoom call or meeting people are in.
- Create personal lists/favorites of other users.
 - Calling all on the list.
- Seeing the location of all members on a user's list.
- One-click group meeting assembly.
- View what meetings are going on at a specified date/time (future or in past)
 - Meeting information date/time, meeting topic
 - Meeting participants
- Use browser notifications to alert a user their meeting is 30 and 15 minutes away from starting.
- When it's time for a user to join a scheduled call, have a modal in the UI that appears with a link to join their meeting in the Zoom client.
- Create an interim employee directory database that holds a simple hierarchy, and mimics (a simplified version of) HSBC's Active Directory.

Stretch Goals (prioritized):

- Integration of the product with Outlook using the Outlook REST APIs to get details of recurring meeting times.
- If a meeting was recorded, have the link to the recording be available in the UI.
- Have the recorded meeting video be playable in the browser instead of a link to download.
- Notify the invitees by email (using Outlook REST APIs) if they are not able to be called or are not in the Zoom room after 2 minutes.
- Using Infrastructure as Code (IaC) to provision infrastructure using Terraform.

Benefits of Project

- Not required to rely on chat services to check on the status of team members.
- Can organize meetings more effectively, and combines the benefits of both online and in-person team environments.
- Allows for spontaneous meetups between employees, mimicking a real office environment.

Scope

The project consists of a web app dashboard that shows current and upcoming virtual meetings, as well as the whereabouts of team members and other coworkers.

In Scope

- A web application that includes the features mentioned in the project goals.
- A sample database that represents HSBC's employees.
- A sample version of SSO that allows users to have personalized accounts and information.
- A personalized experience for each account (sample accounts using our version of SSO) (favorites, upcoming/past meetings, etc.).

Out-of-Scope

- Full integration with HSBC's database (Active Directory) and internal systems.
- Adding HSBC's SSO for user accounts and linking them to the company's Zoom.

Estimated Effort and Cost

| Software Access | Justification |
|-------------------------------------|---|
| Zoom Pro Edition. | Allows for meetings to be recorded, something that is necessary to meet the stretch goals related to zoom recordings. |
| Funds for AWS and Lambda functions. | In the event that we use AWS and Lambda functions past Need funds to run Lambda function tests as each call to the function has a set cost. |

| Task | Effort (Total Hours) |
|---------------------|----------------------|
| Design and Planning | 150 hours |
| Development | 450 hours |
| Testing | 100 hours |
| Deployment | 150 hours |

Project Constraints, Assumptions, Risks, and Schedule

Constraints

- Concurrent usage of at least 20 people.
- Response times for an individual search be < 3 seconds.
- Scale design capacity to accommodate up to zoom maximum.

Assumptions

- That we have access to AWS, Zoom and any other software to the extent we'll need to complete our goals.
- That we have access to Zoom Pro for testing recording based features.

Risks and Mitigations

| Risk | Mitigation | |
|--|---|--|
| Have not previously used Zoom API and Outlook API | Many of us have used other APIs, and have experience thoroughly following documentation, which we will do to learn about the Zoom and Outlook APIs. | |
| Very little AWS/DevOps experience | We will read documentation, and work as a group to understand, test, and gain experience with the cloud tools required for this project. | |
| Currently, team members are in different time zones. | We are scheduling around this so members are available at reasonable times. Also, soon, all team members will be in the same time zone. | |

Estimated Schedule

| Milestone or Key Activity | Start | Complete |
|---------------------------|---------------------|---------------------|
| Project Plan | January 17th, 2022 | January 25th, 2022 |
| Requirements | January 24th, 2022 | February 2nd, 2022 |
| Design | January 31st, 2022 | February 9th, 2022 |
| Work in Progress Link | February 11th, 2022 | February 16th, 2022 |
| Mid Term Project Status | February 9th, 2022 | February 16th, 2022 |
| Peer Review #1 | February 14th, 2022 | February 16th, 2022 |
| Test Plan | March 2nd, 2022 | March 9th, 2022 |
| Final Delivery Submission | March 30th, 2022 | April 4th, 2022 |
| Peer Review #2 | April 7th, 2022 | April 11th, 2022 |