

**CPSC 319 Industry Sponsor:** Galvanize

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### **Background:**

Headquartered in Vancouver BC, Galvanize is a software company with offices in Singapore, London, Tokyo, Bangalore, and New Jersey. The primary business is building security, risk management, compliance, and audit software. Their integrated risk management software approach helps unite these teams with their HighBond platform in order to strengthen individuals and protect organizations.

### **Business Statement/Requirement:**

Scheduling of interviews can be challenging at Galvanize. They often have interview candidates come into their office for face-to-face interviews, and they must match them with appropriate interviewers. This includes anything from a 30-minute time slot to meet the hiring manager, or perhaps a 5-hour time slot consisting of back-to-back meetings with a number of interviewers, and perhaps a lunch break. The challenge is choosing the best time slot for the candidate to come to the office, and then find a suitable sequence to meet the interviewers. Finally, it's best to book a suitably-sized room for the whole duration of the interviews, to avoid shuffling between rooms.

We are therefore given the following constraints:

- The interview candidate provides blocks of time (ranging from 30 minutes to 8 hours) they're available to visit the office (for example, Tuesday 1pm to 5pm, or Wednesday 9am-12pm). It should be possible to schedule a break (for example, lunch) at a specific time.
- The hiring manager provides a list of possible interviewers, indicating whether they're required reviewers, or optional reviewers. Some interviewers prefer to conduct interviews with a colleague (for example, John and Mary will meet with the candidate at the same time, but Frank will meet with the candidate alone).
- The hiring manager specifies the standard number of minutes for interviews (e.g. 45 minutes), although as an advanced option, certain interviewers might require a different number of minutes.
- There will be a fixed list of interview rooms that are suitable. Ideally, all the interviews should occur in the same room, although switching once (especially after lunch) is acceptable.

### **Project Deliverables:**

As a SaaS company, we run our company using web-based tools. Therefore, we need a web-based tool that HR and Hiring Managers can log into to set up and configure interviews. All schedule information (for interviewers and meeting rooms) is available in Outlook 365, and all interviewers have accounts.

The purpose of this tool is to identify one or more suitable schedules that match the above constraints. The baseline information for an interview can be compiled by multiple individuals (ie: HR, hiring manager(s)). Once all the relevant inputs are completed (ie: who are the interviewer(s), candidates, available time slots), HR representative or Hiring Manager is presented with viable options. They can then select one of the options, and the system will automatically send out meeting invitations

Neither the interview candidate or interviewees will need access to this tool, although interviewees will receive meeting invitations via Outlook/Exchange. For project scope, you can assume candidates will not decline meeting invites.

Other requirement considerations:

- As a base solution, the system will allow Galvanized HR staff to register the candidate (and assign initial randomly generated password). For stretch goal purposes, the system can also allow interviewees to signup (self register). All new user signup will require 2 levels of security.
- Break in an interview and change rooms after break.
- There should be a basic administration module to allow for system maintenance including resetting of a user's profile, deleting profiles, removing existing calendar invites and other related functions.
- There are no UI/UX standard required for this project - just make it easy to use.

### **Non Functional Requirements:**

- Round trip response time is less than 2seconds.
- System can support concurrent users (minimal concurrency of 5)
- Security - new user signup will require 2 levels of security. << Peter to elaborate>>
- Beyond the above non-functional requirements, teams are asked primarily on functional needs

### **Stretch Goals (in priority order):**

- Active Directory integration for internal Galvanize users
- Multi-browser support (Chrome, Microsoft Edge)
- Be creative to add functions but reporting is not required and not considered a stretch goal.
- The system can accommodate re-scheduling should one of the candidates and/or interviewers need to change schedules. The meeting would move from scheduled to pending state and leverage the previous steps of the system.

### **Proposed Technology/Environment:**

- Outlook 365 for educational use: <https://products.office.com/en-ca/academic/compare-office-365-education-plans>
- Microsoft Graph: <https://developer.microsoft.com/en-us/graph> (assessment of viability is required)
- Browser standard: Chrome
- Our preferred technologies – for us to maintain your code afterwards, we'd prefer you select from the following technologies: NodeJS/Express, and/or React.