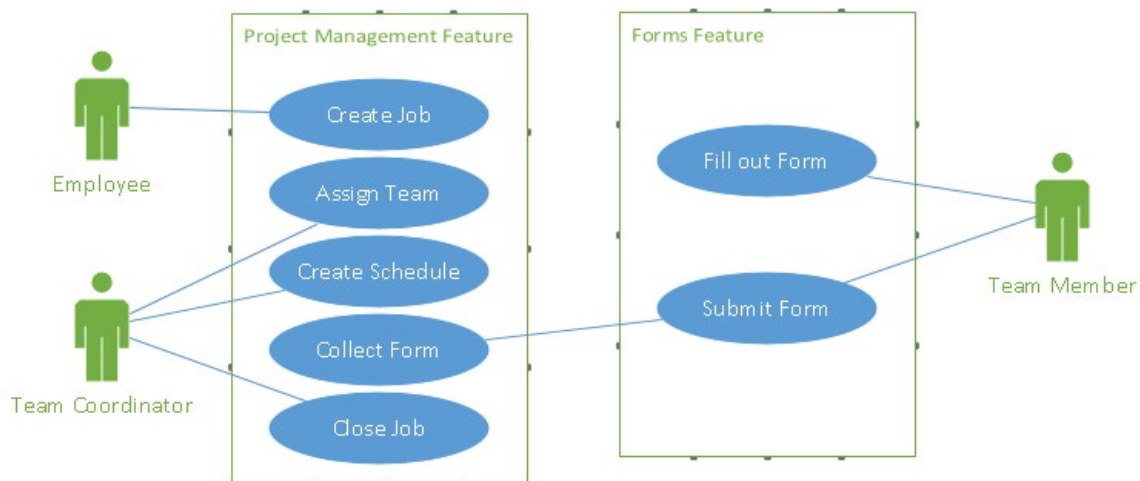


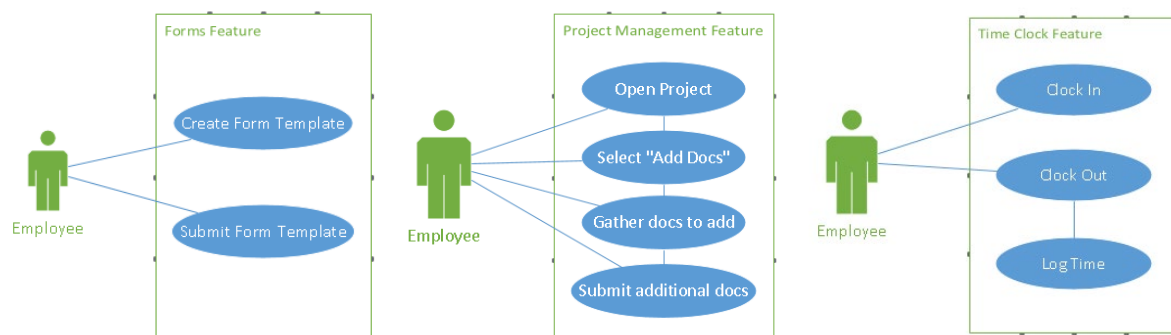
### Project Conceptual Design

The primary flow of operation that will occur for a single job will begin with whoever secures a job, whether it is a Team Coordinator who answers the company phone lines or another employee, where they will then create an instance of the job within the project management feature of the application. From there, the job will be assigned to one of the business' teams who are located the closest to the job site as determined by their team coordinator. The Team Coordinator also configures the schedules of their team members so they can be directed where to go and when. Once the job has been assigned to a team, said team will then visit the job site based upon their schedule and perform their initial assessments of the situation through the use of their custom forms created through my solution, which are then submitted under the project's directory. As work progresses on each job, more forms will be submitted to indicate progress updates which will in turn automatically update the job's timeline to completion, but will allow for the manual updating of the job completion timeline. When a job has been completed, the supplication will send out the bill to the job client and will then mark the project as completed within the management software when payment has been submitted.

#### Main Use Case Diagram

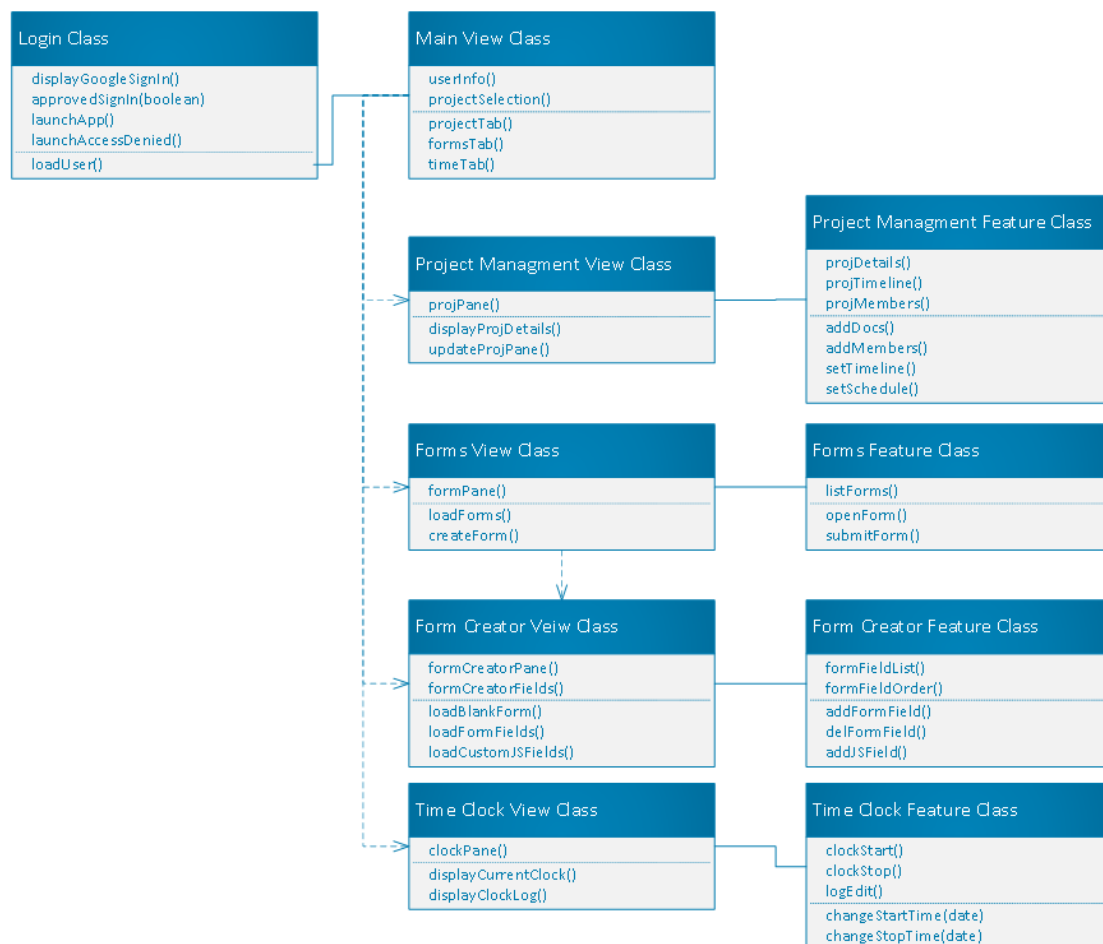


#### Use Cases to Implement



In terms of the use cases I plan on implementing over the course of the semester, the custom form creation tool is the most important. The ability to create forms that are tailored to an organization's business flow is crucial because the solution should work for the users, not the other way around. The amount of customization that will be allowed for forms will go to the level of being able to insert custom JavaScript code for individual form fields, alongside default fields that will be included such as Labels, Headings, Dropdown selection boxes, Multiple choice fields, multiple selection Checkbox fields, and Text Areas. Each field will allow for the customization of actions depending upon a field choice like the checkboxes and multiple-choice fields that can change the details of a job within the project management software or send a copy of the form via email to a user or group specified in the form. Another important use case to implement is the addition of files outside of this solution to the project instance. Employees that are assigned to a job will be able to select a "File Upload" button that will allow a user to add files from wither their computer or their Google Drive to the job's directory within the organization's cloud drive. The final use case to implement would be the Time Clock feature. This feature will allow all of an organization's employees to clock in and out of work, allow users to edit their time sheets in the event that they forget to clock in or out, and automatically log each user's time within the company's payroll system of their choice. In the case of an employee logging more time than they have actually worked, administrators will be able to review submitted time sheets and approve them before they are submitted to the payroll system.

### Class Diagram



The classes that have been defined above deliver the core functionalities of my intended solution, but there may be more classes in the final submission as the project develops. The Login class will be what users first encounter when they launch the application. It will handle authenticating users and loading their G Suite profile to gain access to their organization's platform. Once the user's profile has been loaded into the system, they will be greeted by a tabbed window created by the Main View class with the solution's Project Management, Forms, and Time Clock features loaded in each tab and displaying the Project Management tab first. The Main View class will also load the most recent project the user has edited during their last use of the solution. The Project View class will load the project details including the project name, who is working on the project, the files that are associated with the project, and the project timeline which are all processed by the Project Feature Class. The Forms View class will load the company's forms for a user to select which loads the Forms Feature class allowing users to fill out and submit forms to the project selected in the Main View class, and will also have a button that loads the Form Creator View class. The Form Creator view class will display the features included in the Form Creator Feature class, allowing users to select from predefined form fields from the Feature class and add some of their own. The Time Clock View class will be loaded in the Time Clock tab and will display a user's recent logs as well as the options for clocking in and out as well as editing previous time sheets from the Time Clock Feature class, including the upload of new time sheets to the payroll system as well as the amendment of logged time sheets.