

RestHUB Project Estimate

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Introduction

RestHUB is to be a comprehensive project and company management software solution with a few rather dynamic features. In order to effectively implement these features while having a working application as early as possible, I will employ the development strategy as defined below. The features to be included in the final release of RestHUB are a project management feature, a form creation and submission feature, and a time sheet feature for the organization's employees. The first feature that I plan to integrate is the forms feature. I chose this as the first feature to implement because it is rather simple and will allow me to easily implement the other forms features later. I will first implement the opening and submission of Initial Assessment forms, which are the most basic forms that are only tied to a job if that job is accepted. The custom form creation and submission features will be implemented following the implementation of creating project instances. Following the Initial Assessment implementation, I will implement the time clock feature. I will first implement the logging of start and stop times based on dates. The time sheet editing feature as well as allowing access to the Human Resources department will follow the implementation of G Suite account support. The next features to implement will be the creation of the project management feature including job instance creation, job properties generation, and uploading files to the job directory. Following this implementation, the rest of the features defined within the project will be implemented in the order of assigning employees to specific jobs and job services, the generation of job completion estimates, and the closing and re-opening of existing jobs.

User Stories

User Story #	User Story
1	An employee can submit a general Initial Assessment form. The Initial Assessment form is used by construction and restoration companies in order to gather the basic information of a job. This information is used in determining whether or not the job will be accepted by the company as well as scoping out the services that will be required in order to complete a job. Initial Assessment forms will be submitted to an Initial Assessment location where the Team Coordinators will determine whether or not to open a job instance for the requested services.
2	A Team Coordinator can create a job instance in the project management feature. Job instances that are created will create a new folder in the company's cloud drive that is named based upon the client and their address. The job instance folder will also contain a properties file that hold the project's metadata. The job instance folder will store all forms submitted to the job, all pictures submitted to the job, as well as all additional files submitted to the job such as estimating reports and invoices.
3	A Team Coordinator can assign the new job instance to one of their assigned service teams or to another Team Coordinator. Since jobs are location based, a Team Coordinator that creates a job instance may not be the one to manage it. Once the job has been assigned to a Team Coordinator, they can assign a certain team from the

	branch they manage to that job for it to be completed. Service teams that are assigned to a job will see that job instance as one of their available jobs within the project management software until that job's completion.
4	A Team Coordinator can edit their assigned team members' schedules. As forms and reports are submitted to a job instance, they will create a need for work to be done. Once the services that are required for a job are defined, the Team Coordinator will use the project management software to determine who on the team assigned to the job will carry out each of the requested services and when. These schedule updates will appear as a Gantt Chart displayed in the project management view of the application and will contain information about what service is being performed and when, with each service time estimate being based upon the company average, as well as which team member is assigned to each service.
5	An employee can create a new form type. Construction and restoration jobs can involve many different types of services such as initial assessment, waste disposal, carpentry, plumbing, water removal, electric work, contents, mitigation, estimation, and repairs. Each of these services requires special formats for recording and reporting the information gathered at a job site, which means that use-specific forms are a necessity. New forms that are created will be added to the list of available forms that can be submitted to any job instance.
6	An employee can submit a form populated with job information to a job instance. When working on a job, an employee may fill out a form selected from the list of the organization's available forms to a specific job instance. The form's content will be determined by the form type and will be submitted to the project instance currently selected by the user.
7	An employee can submit additional files that are not created within the application to a specific job instance. Jobs that are being processed by the company may require additional types of information, such as estimating reports and invoices, that are created by other programs outside of the application. These files can be added via an "Add Files" button located in the project management feature in the application. Files submitted are added to the job instance's directory.
8	A Team Coordinator can close a job instance. Once all services have been completed, an invoice has been sent and recorded in the job instance, and the receipt of payment for the invoice is added to a project instance, the job is considered completed. The Team Coordinator will then be able to select the option "Close Job" which will make a final record of the time of completion and remove that instance from being able to be edited.
9	A Team Coordinator can re-open a closed job instance. Sometime other factors that were not seen initially by the service teams may arise and cause issues for a client, sometimes a client will request additional service after a job has been completed, and occasionally a job is done incorrectly. In these cases, the job will need to be re-opened to allow for the logging and management of the services requested by a client.
10	An employee can clock in and out of work using the Time Clock feature of the application. Once an employee begins their work day either at the office or at a job site, they can navigate to the time clock feature and select "Clock In" which will make a record of their start time. Once they have completed their work for the day or leave the office, an employee can select "Clock Out" to record the time when they are finished for that day. An employee can clock in and out as many times as they want in

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	a day. The clocked-in time and clocked-out time are added to that employee's time sheet which exists in the company's cloud drive and are saved based upon the date.
11	An employee can edit their time sheet. It is occasionally the case that an employee may forget to clock in or out which will give inaccurate data to the Time Sheet log. In this case, employees have the ability to edit their start and stop times based upon each day. These changes are recorded and included as notes in the time sheet data.
12	Human Resources can access all employee's Time Sheets. In order to pay the employees for their service as defined by their employee contracts, the Human Resources department will be able to access all employee time sheets to submit them to the payroll service that is used by the company.

Product Backlog

Backlog #	User Story #	Backlog Item Description
1	1	An employee will open a new Initial Assessment form from the forms feature of the application
2	1	An employee will submit an Initial Assessment form to the Initial Assessment drive with populated information fields
3	2	A Team Coordinator creates a new job instance within the company jobs directory
4	2	A new job instance generates an initial metadata file containing basic project information
5	3	A Team Coordinator can assign the job to another Team Coordinator
6	3	A Team Coordinator assigns the job to a specific team
7	4	A Team Coordinator sets the job's required services
8	4	A Team Coordinator assigns team members to each defined required service
9	4	The application generates a project completion estimate based on services required, the employee assigned to the service, and the average time each service takes to complete
10	5	An employee can create a new form type
11	5	New form type is added to the company's list of available forms
12	6	An employee can open a form from the list of available forms to record job data
13	6	An employee can submit a form populated with job information to that job's directory
14	7	An employee can upload additional files to a job directory relevant to a job in the project management feature
15	8	A Team Coordinator closes a completed job instance, disabling it from being edited
16	9	A Team Coordinator re-opens a completed job instance, enabling it to be edited again
17	10	An employee clocks in and the application records their start time
18	10	An employee clocks out and the application records their stop time
19	10	A daily report of each employee's hours is recorded at the end of each day (after 11:59PM on that day) and submitted to the time sheet directory

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20	11	An employee can edit their time sheet before the next pay period which updates the time sheet log and makes note of the changes
21	12	Human Resources can access the time sheet to upload it to the payroll service

Project Sprints

Sprint #1: from 6/3 to 6/16					
Backlog #	Task Description	Story Point Estimate	Story Point Actual	Status*	Comments
1	Clarify requirements & design the new feature	1		Not started	
1	Development	2		Not started	
1	Testing & acceptance	1		Not started	
2	Clarify requirements & design the new feature	1		Not started	
2	Development	1		Not started	
2	Testing & acceptance	1		Not started	
17	Clarify requirements & design the new feature	1		Not started	
17	Development	1		Not started	
17	Testing & acceptance	1		Not started	
18	Clarify requirements & design the new feature	1		Not started	
18	Development	1		Not started	
18	Testing & acceptance	1		Not started	

Sprint #2: from 6/17 to 6/30					
Backlog #	Task Description	Story Point Estimate	Story Point Actual	Status*	Comments
10	Clarify requirements & design the new feature	1		Not started	
10	Development	2		Not started	
10	Testing & acceptance	1		Not started	
11	Clarify requirements & design the new feature	1		Not started	
11	Development	1		Not started	
11	Testing & acceptance	1		Not started	
12	Clarify requirements & design the new feature	1		Not started	
12	Development	1		Not started	
12	Testing & acceptance	1		Not started	
13	Clarify requirements & design the new feature	1		Not started	

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13	Development	1		Not started	
13	Testing & acceptance	1		Not started	

Sprint #3: from 7/1 to 7/14					
Backlog #	Task Description	Story Point Estimate	Story Point Actual	Status*	Comments
14	Clarify requirements & design the new feature	1		Not started	
14	Development	1		Not started	
14	Testing & acceptance	1		Not started	
19	Clarify requirements & design the new feature	1		Not started	
19	Development	1		Not started	
19	Testing & acceptance	1		Not started	
20	Clarify requirements & design the new feature	1		Not started	
20	Development	1		Not started	
20	Testing & acceptance	1		Not started	
21	Clarify requirements & design the new feature	1		Not started	
21	Development	1		Not started	
21	Testing & acceptance	1		Not started	

Sprint #4: from 7/15 to 7/28					
Backlog #	Task Description	Story Point Estimate	Story Point Actual	Status*	Comments
3	Clarify requirements & design the new feature	1		Not started	
3	Development	1		Not started	
3	Testing & acceptance	1		Not started	
4	Clarify requirements & design the new feature	1		Not started	
4	Development	1		Not started	
4	Testing & acceptance	1		Not started	
7	Clarify requirements & design the new feature	1		Not started	
7	Development	1		Not started	
7	Testing & acceptance	1		Not started	
9	Clarify requirements & design the new feature	1		Not started	
9	Development	2		Not started	
9	Testing & acceptance	1		Not started	

Sprint #5: from 7/29 to 8/6					
Backlog #	Task Description	Story Point Estimate	Story Point Actual	Status*	Comments
5	Clarify requirements & design the new feature	1		Not started	
5	Development	1		Not started	
5	Testing & acceptance	1		Not started	
6	Clarify requirements & design the new feature	1		Not started	
6	Development	1		Not started	
6	Testing & acceptance	1		Not started	
8	Clarify requirements & design the new feature	1		Not started	
8	Development	2		Not started	
8	Testing & acceptance	1		Not started	
15	Clarify requirements & design the new feature	1		Not started	
15	Development	1		Not started	
15	Testing & acceptance	1		Not started	
16	Clarify requirements & design the new feature	1		Not started	
16	Development	1		Not started	
16	Testing & acceptance	1		Not started	