American Heart Screening Management System

Milestone 1 Evaluation

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Client:

Evan Ernst, CEO - Who We Play For

Klynton Holmes, Tech Advisor - Who We Play For

Progress of Current Milestone

Task	Completion %	Carlo	Chris	Drew	John	Noah	TODO
1. Simple demo of architecture using AWS	100%	20%	20%	20%	20%	20%	None
2. Simple demo of test framework	100%	20%	20%	20%	20%	20%	None
3. Resolve technical challenges	100%	20%	20%	20%	20%	20%	All team members have gained an initial understanding of the tools and frameworks, but there is still much to learn.
4. Compare and select collaboration tool	100%	20%	20%	20%	20%	20%	None
5. Create requirements document	100%	10%	35%	35%	10%	10%	Additional requirements may be added in future
6. Create design document	100%	35%	10%	10%	10%	35%	None
7. Create test plan	100%	15%	15%	15%	40%	15%	Additional tests may be added for new requirements
8. Email reminder notification day before event	70%	50%	0%	50%	0%	0%	Create CloudWatch trigger for Lambda function for daily query/notification

9. Close event registration day before event	70%	50%	0%	50%	0%	0%	See above comment
10. Vary verbiage depending on participant’s age	50%	0%	100%	0%	0%	0%	Create a case for when the applicant is an adult. Change registration prompts so they are based on the user's age.
11. Auto display available times slots for private events	50%	0%	0%	0%	0%	100%	Implement command to auto select events so times get displayed
12. Provide link for private events	60%	0%	0%	0%	100%	0%	Generating link, creating button to display link
Create a payment management system	0%	--	--	--	--	--	Due to changing requirements since the creations of the project plan, above features (8-12) were prioritized
Implement appointment rescheduling functionality	0%	--	--	--	--	--	See above comment

Accomplishments

- Task 1:
    - Created a simple web application using a combination of different AWS resources. UI was developed using VueJS and hosted on S3 bucket.

    - Backend was developed on Lambda and triggered through API Gateway to fetch data from a DynamoDB table and display a message on the UI.
- Task 2:
    - Each team member experimented with the Mocha and Chai test frameworks to practice test-driven development (TDD) and gain familiarity with unit testing and assertions.
- Task 3:
    - Team members were tasked with small assignments by the client to learn tools/frameworks such as Terraform, AWS, NodeJS/VueJS, and the existing codebase. After initial learning, team members applied this knowledge on user stories related to the project
- Task 4:
    - The team decided on Discord (informal) and Slack (formal) as general forms of communication. Google Drive was selected as the storage for all team documents/presentations. Gitlab was selected over Github for code collaboration, since the existing codebase is already available there and is used by the client.
- Task 5:
    - Many of the requirements for the near to mid future were discussed with the client and defined. However, new requirements and changes to existing requirements are likely to arise in the future.
- Task 6:
    - The majority of the design document consisted of learning and describing the architecture, flow control, storage, and user interface of the existing system that we will be adding to. Large changes to the existing design are not expected, except in the implementation of new features.
- Task 7:
    - The test plan was written following the completion of the requirements document; all of the tests were written with a particular requirement in mind.
- Task 8:
    - Wrote a query for DynamoDB to get all InProgress events occurring on a given data, regardless of the director that it is associated with
    - Researched cron-job implementation with CloudWatch as a trigger for a Lambda function
    - Challenges:
        - Necessary permissions for Lambda function creation and DynamoDB index creation were a roadblock, as they were

discovered during the implementation of the task. These needed to be configured by the client as they were discovered

- Task 9:
    - This task was worked on in parallel with the automatic email reminders (task 8) since they shared many similarities (see comments above)
    - Once tomorrow's events are queried, the status of each event will be changed from "InProgress" to "Finalized" to prevent any more participants from registering online
- Task 10:
    - Currently, the registration system asks the user questions such as: "What is *your child's* [xyz]". We want this to change to: "What is *your* [xyz]", if the user is 18 or older.
    - So far, we have identified the files containing the current verbiage and have begun writing different cases to check the user's input. Once the test cases work, we will add the new verbiage to the registration system.
- Task 11:
    - Currently the available times only display when an event is clicked, so to ensure times are displayed automatically, a command will be toggled automatically when all events load so times appear without the need of clicking events.
    - Will be a JavaScript function or file
- Task 12:
    - Currently the location in the codebase to modify has been determined. Right now, the best approach for certain things in this task such as link creation are being determined. After determining what methods to use, the code will be implemented and tested.

Contributions

Carlo

- Looked over the DynamoDB table and evaluated the optimal way of querying data needed for the lambda function.
- Worked with the client to figure out the AWS IAM permissions needed to be granted in order to complete the ticket.
- Worked on the implementation of automatic event finalization with Drew for the day before the event using a scheduled cron job for an AWS Lambda function.

Chris

- Worked on the implementation of new verbiage for the registration system.
- Focused on writing requirements document.
- Updated our team's website.

Drew

- Worked on the implementation of automatic email event reminders with Carlo for registered participants using a scheduled cron job for an AWS Lambda function.
    - Created a query for DynamoDB table to get all in progress events on a specific date.
    - Wrote integration tests for query.
- Focused mainly on communicating with the client and writing requirements for new features and changes.
- Worked with John to implement backend functionality for the hello world app using AWS API Gateway as a trigger for Lambda.
- Maintenance of team Discord server and Google Doc file permissions/formatting.

John

- Worked with Drew to implement the backend of the hello world test by writing Lambda functions and working with an API Gateway in AWS.
- Created hello world test for testing tools (Mocha and Chai).
- Wrote the majority or the test plan document for Milestone 1
- Assisted teammates with various blockers including setting up required tools (Mocha, Node, Chai, etc) and the code base for our project.

Noah

- Worked on the implementation of auto displaying times for events using JavaScript.
- Assisted team members in solving issues with demoing of test framework and resolving technical challenges.
- Focused mainly on the creation of the Design document for the system.

Plan for Milestone 2

Task Matrix (In order of priority)

Task	Carlo	Chris	Drew	John	Noah
1. Finish in-progress tasks from milestone 1	20%	20%	20%	20%	20%
2. Onsite screening results management	20%	20%	20%	20%	20%
3. Search Payment by several filters	20%	20%	20%	20%	20%
4. Export Payments to Spreadsheet	20%	20%	20%	20%	20%
5. Participant cancel registration	20%	20%	20%	20%	20%
6. Confirm/Request Deletion of event	20%	20%	20%	20%	20%

Note: tasks will most likely be distributed on a first-come-first-serve basis as team members complete milestone 1 tasks

Discussion of Upcoming Tasks

- Task 1: Before starting on any new tasks, each team member will focus on finishing their initial task from milestone 1
- Task 2: Cardea is the ECG screening software that interfaces with the hardware (electrodes) and stores the results. Cardea results can be pointed to a specific folder. We want to set up a network where all participant files live on one computer and all Cardea software is pointed to that folder.

- Task 3: Accountants should be able to filter and search for participant payments by date, date range, event, and participant.
- Task 4: Accountants should be able to download payments of participants registered for an event
- Task 5: Participants should be able to cancel a registration after they have registered for an event
- Task 6: Directors should have the ability to request deletion, and be asked for confirmation when doing so.

Meeting Dates

Date	**Discussion Points**
September 13th, 2021	● Demo of current user interface ○ Director event creation ● Discussion of Terraform and future need for infrastructure (Milestone 3) ● Initial discussion of requirements and design documents
September 15th, 2021	● Begin requirements gathering
September 20th, 2021	● Discussion of created user stories ● Overview of codebase ● Gained individual access to UI testing account
September 23rd, 2021	● Each team member was assigned their first user story ● Official start of sprint
Recurring meetings MWF 11:45am-12:00pm & 4:30pm - 5:00pm	● What we did since last meeting ● What we are working on until next meeting ● Any blockers/impediments

Feedback for Milestone 1

Client

- Happy that everyone was able to get the project cloned and running locally as well as the user interface

Faculty Advisor

- Task 1:
- Task 2:
- Task 3:
- Task 4:
- Task 5:
- Task 6:
- Task 7:
- Task 8:
- Task 9:

Faculty Advisor Signature: ________________________________ Date: ________

Evaluation by Faculty Advisor

- Faculty Advisor: detach and return this page to Dr. Chan (HC 214) or email the scores to pkc@cs.fit.edu
- Score (0-10) for each member: circle a score (or circle two adjacent scores for .25 or write down a real number between 0 and 10)

Carlo	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Chris	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Drew	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
John	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Noah	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10

Faculty Advisor Signature: ________________________________ Date: __________