# American Heart Screening Management System

## **Milestone 4 Evaluation**

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## Led By:

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## Sponsored By:

Dr. Eraldo Ribeiro eribeiro@fit.edu

## 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.Director UI updates	100%			100%			
2.Implement Automatic Spreadsheet Updates	100%	50%		50%			
3.Design Mockup Accountant UI	100%	100%					
4.Create user surveys and add corresponding buttons to UIs	95%		100%				- User questions will be modified/expand ed depending on first round of feedback
5.Implement Accountant UI	70%				25%	75%	- Setup new GSuite account - Implement and test necessary backend functionality
6.Resolve bugs	80%		30%		70%		- On-site registrations should not have time slots / limits, as any number of walk-on participants may register and wait

				in line. - Editing an event does not update database, only UI - Address any new bugs as new features are added
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#### Accomplishments

- Task 1: Director UI Updates
  - Separate tab for *Active* and *Completed* tasks
  - Sorting by date on InProgress events and Completed events
  - InReview status prefix for DeleteRequested/Deleted events
  - Status column for Finalized (and InReview) events, in which the table is sorted by
  - Action for director to request deletion of an InProgress event with a confirmation dialog
    - Confirming the request moves the event to finalized table to prevent any other modification
  - Pagination on tables that have more than 20 events
  - New query for registration links, to get Published, InSession, and Happening events, so that participants can still sign up after finalization and while the event is happening
  - Stubbed action to export the payment sheet for an event in the Completed Events table.
- Task 2: Implement Automatic Spreadsheet Updates
  - Communicated with WWPF owner for requirements regarding the Cardea software, such as expected excel sheet headers and data format
  - Setup automated remote updates to excel spreadsheet
    - Configured a shared S3 bucket for directors, in which event spreadsheets are temporarily stored (deleted day after the event)
    - Export a pre-signed URL to remote spreadsheet upon event finalization (5pm the night before an event), made available via the director UI

- Configured an EventBridge scheduled rule to update spreadsheets periodically, *only* during the time of the event (Happening events)
- Tested automated local spreadsheet updates
  - Configured excel to pull data from the web using a pre-signed URL to the corresponding event spreadsheet in S3
- Created a guide for WWPF volunteers to follow in order to set up automated spreadsheets for an event
  - Director sends pre-signed URL to all volunteers of an event, allowing them to quickly setup for remote updates
- Task 3: Design Mockup Accountant UI
  - Met with an accountant for WWPF to better understand the current system and what changes/features they would like to see.
  - Took accountant feedback and used it to design a mockup UI using Adobe Creative Cloud.
  - Mockup UI now being used for implementation.
- Task 4: Create user surveys and add corresponding buttons to UIs
  - Build two surveys using Google Forms
  - Build banner for participant and director UIs
  - Link banner button to survey
  - $\circ$   $\$  Route survey data to team members
- Task 5: Implemented Accountant UI design
  - Based on the mockup Accountant UI, implemented the online format of the mockup.
  - Created dropdowns and filters for searching for payments
  - Created table to hold all payments in.
- Task 6: Resolve bugs
  - Fixed bug where events with optional payments did not allow participants to opt out of paying.
  - Determined the cause of a bug in which event types are not properly updating in the database.

#### Contributions

Carlo

• Held multiple meetings with members of WWPF to gain information and feedback about the accounting and heart screening process.

- Accounting: the information they want displayed as well as the features they would like to see (search, refund, etc.).
- Screening: how they set up screening events and what information they need in the Excel sheet for participants.
- Designed and created the mockup UI for accountants.
- Worked with Drew to locally test the automatic spreadsheet update on local machines to mimic on-site computers at screening events.
- Created user guide/manual for volunteers to refer to when setting up a screening event in order to enable the automatic spreadsheet update on their local machines.

#### Chris

- Added a banner to both participant and director UIs
  - $\circ$   $\;$  Linked banner to surveys and routed survey to team members
- Created two forms with Google Forms for participants and directors to provide feedback after for beta testing.
- Began fixing bug with private/public event editing not updating the database (only the UI)

#### Drew

- Hosted team status meetings
  - MWF on days we don't meet for senior design class
  - Discussion Points: Current progress, blockers, demos
- Completed director UI updates
- Integrated automatic spreadsheet changes with current state machine and deployed for AWS via Terraform
  - Wrote unit and integration tests to verify functionality
  - Worked with Carlo to test locally with different machine/OS (Windows)
- Made updates to automated emails
  - Automated AWS upload process with Makefile
  - Configured a no-reply email for automated event receipts and reminders
  - Modified template to include event host and a support email for participants to contact with any questions
- Demoed current progress to client and a current director

John

• Fixed bug in which optional payments did not allow participants to opt out.

- Assisted in finding cause and potential solution to bug not properly updating the types in the database
- Began implementing search functionality for finding payments in accountant UI.
- Began making functionality for exporting payment spreadsheets.
- Began setting up GSuite account for UI and routing for accountant UI.

#### Noah

- Assisted in Director UI changes and displaying a single private event given the private event link
- Completed Accountant UI frontend design.
  - Implemented layout for "search by" filters to allow the accountant the search payments by certain filters. (participant name, event ID, etc)
  - Created table for payments to be displayed in

### Plan for Milestone 5

#### Task Matrix (In order of priority)

Task		Carlo	Chris	Drew	John	Noah
1.	Finish table for payments to be displayed in for Accountant UI					100%
2.	Implement "search by" backend functions for Account UI		33%		33%	33%
3.	Accountant export payments for an event as a spreadsheet				100%	
4.	Implement separate registration method for on-site registrations and adjust UI			100%		
5.	Implement QR code generation for on-site registrations	100%				
6.	Bug fixes		50%	25%	25%	
7.	Create poster for showcase	50%	50%			

8. Create ebook for showcase	20%	20%	20%	20%	20%
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#### **Discussion of Upcoming Tasks**

- Task 1: Finish Table of Payments for Accountant UI
  - Headers for table have been made
  - While the skeleton has been created, the table needs to be fully functional and display all payments in the table.
- Task 2: Implement "search by" backend functions for Accountant UI
  - An accountant needs to be able to search the payments by:
    - participant name
    - cardholder name
    - event ID
    - email
    - phone number.
  - Much like the table, the skeleton has been made (a dropdown menu and input fields have been created to select how and what to search by). Once the table has been created, multiple backend functions need to be made to only display or query certain payments based on the set filter.
- Task 3: Accountant export payments for an event as a spreadsheet
  - An accountant needs to be able to export a spreadsheet of all payments for the current day.
- Task 4: Implement separate registration method for on-site registrations and adjust UI
  - On-site registrations need to be simplified from online registration
  - On-site registrations will only have a single event and will use a physical queue of participants instead of time slots, so the UI for on-site registrations will be changed to reflect this.
    - The registration limit corresponding to online registration does not need to be displayed to the participants
  - Need to consider edge cases where an event starts earlier than start time or ends later than end time.
- Task 5: Implement QR code generation for on-site registrations
  - Making a QR code that pulls up the registration form for an event will make on-site registrations faster and easier.
  - Will utilize the unique registration link already generated for an event
  - Directors need to be able to generate the QR code from the UI for printing to be used at events

- Task 6: Bug Fixes
  - Event types and published indexes aren't updated when a director edits an existing event.
  - On-site registrations should not display time slots to participants.
  - Payments to Payeezy through API are not functioning properly.
  - Any other bugs that arise when implementing accountant functionality
- Task 7: Create poster for showcase
  - Minimum template for poster:
    - Motivation and Problem/Goal
    - Approach
    - Implementation
    - Evaluation Results
    - Limitations and Improvements
- Task 8: Create ebook for showcase
  - Minimum template from showcase:
    - Project topic
    - Design problem statement
    - Major challenges
    - Solution methods
    - Data analysis
    - Conclude with a summary sentence
  - Broader implications of our project

## **Meeting Dates**

Client	
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Date	Discussion Points
January 18th, 2022	Gave a demo of director UI updates to client
January 30th, 2022	<ul> <li>Gave a demo of automatic spreadsheet updates and requested feedback</li> </ul>
February 4th, 2022	<ul> <li>Gave a demo of all progress up to this point to client and a current heart screening director</li> </ul>

#### Faculty Advisor

Date	Discussion Points
February 11th, 2022	<ul><li>Presented Milestone 4 Progress</li><li>Requested feedback</li></ul>

### Feedback for Milestone 4

#### Client

• Focus on Accountant functionality to prepare for beta testing

#### **Faculty Advisor**

- Task 1:
- Task 2:
- Task 3:
- Task 4:
- Task 5:
- Task 6:

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 <a href="mailto:pkc@cs.fit.edu">pkc@cs.fit.edu</a>
- 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:	
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