Milestone 2 Evaluation

1. FIT History Tours App
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   - Matthew Tokarski, mtokarski2018@my.fit.edu
   - Tyler Zars, tzars2019@my.fit.edu
2. Faculty Advisor: Fitroy Nembhard, fnembhard@fit.edu
3. Client: Ryan Stansifer, ryan@fit.edu , Florida Tech Computer Science Department
4. Progress of current Milestone (progress matrix)

Task	Completion	Grant	Cam	Matt	Tyler	To Do
Implement and Deploy Basic Web App/Mobile App	100%	5%	5%	5%	85%	
Choose GPS/Location Framework/API	100%	0%	95%	0%	5%	
Build Out Historical Database	30%	0%	5%	90%	5%	Continue gathering content
Trivia UI Implementation	50%	40%	50%	0%	10%	Integrate into the main UI
Game Question Generation	25%	0%	5%	10%	10%	Generate more trivia questions
Begin to Collect Historical Research	70%	10%	10%	40%	10%	Begin parsing into text or other forms of data storage.
Requirement Document	100%	15%	50%	15%	20%	
Design Document	100%	80%	0%	15%	10%	

5. Discussion (at least a few sentences, ie a paragraph) of each accomplished task (and obstacles) for the current Milestone:
   - **Implement and Deploy Basic Web App/Mobile App:** We deployed a basic functionality Web App to show the overall idea of the project and get some building ground to keep building the project off of. The app was deployed to

https://fit-history-tours.live/ with a map view of campus and a get location option on the bottom to view your current location. The map banner will update to if you are inside or outside of the Florida Tech campus. Built on React and deployed statically to DigitalOcean, it utilizes most of the tools we will be using to complete this project.

- **Choose GPS/Location Framework/API:** We found three main geolocation frameworks. Between both MapBox, Google Maps, and Mozilla Location Services our group ended up choosing MapBox. The easy to integrate react-map-gl is custom built to work with React and has many components our group will make use of. It also has a free tier which will allow us to deploy our app without needing to shell out money to Google each time our site loads. Lastly, it provides the map and location data with rich examples while Mozilla Location Services will only get the users location with no map data.
- **Build Out Historical Database & Begin to Collect Historical Research:** After reading both of the history books written about Florida Tech and the university's alumni, we began assembling our findings and information into a document to be fed into our database. While the history provided from the book has been quite beneficial for finding a footing where to look further, we have been in contact with the university to get more archived photos, articles, and more to build a comprehensive timeline of the university. We want to keep the data as a formatted filetype so it can be read into other databases later in the project if we needed to choose or wanted to test with other options later in the project.
- **Trivia UI Implementation:** The trivia user interface was written and deployed separately but the group had issues getting React router to navigate between the different pages of the application (map/trivia). The UI allows for users to play a series of five questions and get back the score of their guesses at the end. It's a multiple choice game instead of having the users input characters to ease users ability to guess or narrow down their options to find the answer.
- **Requirement Document:** This document was updated with feedback from the client to ensure the delivered product would align better with the clients want.
- **Design Document:** This document was updated with feedback from the client to ensure the delivered product would align better with the clients want.

6. Discussion (at least a few sentences, ie a paragraph) of contribution of each team member to the current Milestone:
   - **Grant Butler:** For this milestone, I worked to incorporate the Trivia UI in with the rest of the application, including making dynamic routing between the pages, and providing the framework to expand on the app as we continue development. I also started working on the mobile implementation of the app, using android to start working on using React Native to push prototypes and implement the app on a mobile device.
   - **Tyler Zars:** For this milestone I worked with Cameron to pick a service to provide our map and application data. Once we had picked MapBox, I got to reading and testing some of the examples that they had on their website to implement the different functionalities of MapBox (geolocation, map diagram, waypoints, etc). For this milestone, I fully implemented a basic map with coordinates and zooming

in and out. The map has a "Florida Tech" flag that will turn true when you are inside the university but if you scroll out of the university bounds, it will turn to false. Not part of the to-do's but I deployed our site behind the domain name fit-history-tours.live and pushed the changes with the map to our production domain.

- **Cameron Miskell:** My contributions for this milestone lie in the selection of our geolocation and mapping API and the standalone implementation of the trivia UI. We compared a few options for the purpose of user location information and particularly Google Maps, Mozilla's geolocation API, and Mapbox. We determined that the most cost effective option that provided us with a robust suite of functions was Mapbox, and thus implemented the interface to our live demo of the map with geolocation. For my work on the Trivia, Tyler did some preliminary research for similar examples of quiz UIs to give us a base that we could springboard off of. I made use of what he found and developed the standalone web-app implementation of the Trivia in a rudimentary form with the structure to allow us easy and rapid upgrading in the future milestones. Currently we have an isolated demo that has five hardcoded questions and we have compiled more for future iterations to draw from.

- **Matthew Tokarski:** For this milestone, I mostly researched further into Florida Tech's history and created a timeline full of historical facts and events that are relevant to Florida Tech's development and upbringing. I also started creating the questions for the trivia, using my knowledge of Florida Tech's history. I put these trivia questions and the timeline into files that allow us to utilize what I've researched, within the app. I also secured contact with the University's archivist, in hopes that she can help with further research, as well as provide media for the app. The research into Florida Tech's history isn't quite over, but I've made sure that we now have a good baseline of the major historical events and are ready to start implementing this knowledge into the app.
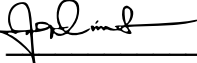
7. Plan for the next Milestone (task matrix)

Task	Grant	Cam	Matt	Tyler
Add GeoLocation Button to Map View	5%	5%	5%	85%
Add Historical Facts to App	5%	55%	35%	5%
Load Trivia Questions into UI	70%	10%	10%	10%
Collect Coordinates for Building/Locations on Campus	15%	15%	55%	15%

8. Discussion (at least a few sentences, ie a paragraph) of each planned task for the next Milestone.
    - **Add GeoLocation Button to Map View:** At the moment, the get location button works but by implementing a Geolocation button from the MapWise library, we can keep track of the user's current location with constant updates. This feature will allow the app to locate someone on first click and in the case of the app losing their location, the button will allow the map to scroll to the user's current location.
    - **Add Historical Facts to App:** The main goal of this task is to implement the facts UI into the application. The application will need the timeline component built to start loading facts and displaying them to the user. This UI will be built with the specifications from the design document. The timeline will scroll side to side allowing the user to browse through facts about their current location on Florida Tech.
    - **Load Trivia Questions into UI:** With the base trivia implementation completed, loading the questions into the UI will allow the game to become playable. The questions will be read in from the storage method of choice and randomly displayed to the user to ensure that they get a unique experience each time they use the Trivia functionality.
    - **Collect Coordinates for Building/Locations on Campus:** Group members will collect coordinates for different locations around Florida Tech. These locations will be collected from the app so the data collected is valid to what the app assumes the current location is. These data points will be combined with the historical database to build a geotagged dataset of history points on the Florida Tech campus.
9. Date(s) of meeting(s) with Client during the current milestone: 10/27/2022
10. Client feedback on the current milestone
    - The map and default location markers are quite nice.
    - The virtual tour should be able to zoom out and see historical facts for places off campus.
11. Date(s) of meeting(s) with Faculty Advisor during the current milestone: 10/28/2022
12. Faculty Advisor feedback on each task for the current Milestone
    - The application is good so far, looking for implementation of different elements and media from the archivist.
13. Faculty Advisor Signature: _____ Date: __10/31/2022__

14. 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)

	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Grant Butler	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	(10)
Matt Tokarski	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	(10)
Cameron Miskell	0	1	2	3	4	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	(10)
Tyler Zars	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: __10/31/2022__