Milestone 3 Evaluation

1. FIT History Tours App
    - Cameron Miskell, cmiskell2020@my.fit.edu
    - Grant Butler, gbutler2020@my.fit.edu
    - 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
Add GeoLocation Button to Map View	100%	0%	0%	0%	100%	
Add Historical Facts to App	100%	0%	70%	0%	30%	
Load Trivia Questions into UI	40%	30%	0%	0%	10%	Reformat YAML and route into main UI
Collect Coordinates for Building/Locations on Campus	30%	0%	0%	0%	30%	Continue collecting coordinates
Build Out Historical Database	45%	0%	5%	90%	5%	Continue gathering content
Trivia UI Implementation	80%	40%	50%	0%	10%	Implement Upstream Changes
Game Question Generation	50%	5%	10%	15%	20%	Generate more trivia questions
Begin to Collect Historical Research	100%	20%	20%	40%	20%	

5. Discussion (at least a few sentences, ie a paragraph) of each accomplished task (and obstacles) for the current Milestone:

- **Add GeoLocation Button to Map View:** With the application tracking users around campus to display facts and routes to different locations, a GeoLocation button was added that tracks the user. This toggle can be enabled and disbaled by the user if they would like the app to stop tracking them at certain points. This is directly integrated with the MapBox API to keep the map and the user's location tied together without difference in the way the latitude and longitude are collected and displayed. Because both come from the same app, they are accurate formats between one another. The map will automatically move with the user as they move around campus.
- **Add Historical Facts to App:** The historical timeline is the main selling point of our application and we are implementing the overview of the whole campus. While it doesn't yet scroll to the current location the user is at, it lays a good foundation for the future implementations and updates that can select only the facts of the building the user is currently at. The timeline is built so the user can scroll through or navigate by buttons to ensure that everyone is able to navigate.
- **Load Trivia Questions into UI:** By tying our historical trivia questions into the app, each user is able to get a different randomly selected set of questions each time they launch into trivia. While the different modes have not been implemented yet, the trivia game will serve the user a new mix of questions each time they load into the game.
- **Collect Coordinates for Building/Locations on Campus:** With the implementation of the Geolocation feature, we began to collect data points inside and around different locations on campus. This will assist us with tying factoids to their respective locations on campus. With more latitude and longitude coordinates collected around campus on different devices, our group will be able to build bounding boxes that are accurate to all different types of devices.
- **Trivia UI Implementation:** Trivia UI routing has proven difficult, and when routing between the base url and trivia implementation using `react-router`, there seems to be a problem with a version mismatch of the base code. An issue has been submitted on their github repository and should be fixed soon.
- **Game Question Generation/Collect Historical Research/Build Out Historical Database**: Progress is continuing on these as we talk with different members of the university and continuing learning and researching more about the university.

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 started correspondence with the Archivist to start scanning in photos from the archive, as well as working on the routing between the different applications being served. An issue with the `react-router` repository currently prevents it from rendering out the routes properly, but a PR is open on their repo to fix it, and hopefully it will get fixed soon. Currently I am finishing up the routing and working on getting the Trivia implementation to read in the questions dynamically on each quiz.
   - **Tyler Zars:** For this milestone I worked to incorporate the MapBox Geolocate controls to the app and ensure that they were working properly. This integration

allows the application to keep track of the users coordinates in real time directly in the application with the simple click of a button. This data is reflected on the screen in the upper right of the map with the map also keeping centered on the user's current location. I also ensured that the user would be able to disengage the geolocation so the app would stop tracking them at the users will. I collected data points around the university for the geolocation to test the added functionality while helping grow our coordinate collection of on-campus buildings. I also assisted Cam in working on the timeline by getting the YAML to successfully parse into readable formats and allowing the timeline to dynamically update if more data is added after the page has loaded.

- **Cameron Miskell:** My task for this milestone involved importing the historical data we have collected so far into the live demo of our webapp. I spent time researching the ideal mode of implementation that incorporates our goals for the project while presenting the information in a digestible format, and finally chose a horizontal scrolling timeline. Upon integration of this container for the data, I shifted focus onto transferring the stored information from an external file into the live app, and this is where my struggles began. I had to first reformat the data so that it could be successfully parsed on import to our project, and now I am dealing with the issue of handling Objects in javascript, where the type appears as *undefined*, but is effectively a dictionary in structure. Accessing lower-level fields of the object does not fix the undefined typing, despite the implicit conversion present in JS. I will continue to work on this issue and some hardcoded placeholder data to allow the webapp to display its intended functionality.

- **Matthew Tokarski:** For this milestone, I collected more historical data, as well as generated more questions for the games (trivia and scavenger hunt). Before, progress on collecting historical data was slow and difficult due to the availability of the university's history being extremely low, with main sources being outdated books and being limited to events that were featured in said books. Now, since we are in contact with the university Archivist, we have access to the most comprehensive and complete set of data for the universities history, with the only problem that most of the information available is not digitized and must be physically sorted through, as well as the fact that the school did not start officially archiving its history until about 2012. Also, what information it contains is very inconsistent and full of gaps, as since it didn't start archiving so late in its life, many records from the early days of the university have to be donated. This has been a major difficulty when it comes to collecting the data, but research is still well underway.

7. Plan for the next Milestone (task matrix)

Task	Grant	Cam	Matt	Tyler
Add Initial Routing	5%	5%	5%	85%

Add Map Layovers	5%	85%	5%	5%
Begin Other Game Implementation	85%	5%	5%	5%
Build Geofences for Buildings	5%	5%	85%	5%

8. Discussion (at least a few sentences, ie a paragraph) of each planned task for the next Milestone.
   - **Add Initial Routing:** While the factoids have been added to the application, the group will begin to lay out the routes and functionality to give the user a guided tour of campus. This initial routing will provide the user with a layout to see a tour with directions to the next stop. This will work in conjunction with the scrolling timeline at the bottom of the app to ensure that the user is able to see facts and have a guide on where to go next.
   - **Add Map Layovers:** Each building will have a clickable layover that will provide more depth along with a short synopsis of the building clicked. We will need to add a layover to each building so the user can click on them. These layovers will have a designated shape to differentiate them from the other features of the app allowing the user to know which buildings have clickable layovers to find out more information.
   - **Begin Other Game Implementation:** With the addition of the scavenger hunt (search and find), we will begin adding the option to select this game mode. With new questions to have the user seek out different things, this game mode will revolve around popups and input from the user to show they have found the correct answer after looking.
   - **Build Geofences for Buildings:** Each building will need a geofence to know if the user is close to it or inside it; hence, we will begin laying out these geofences to match with the applications history factoids. Each geofence will cover the building allowing for the application to see if the user is inside a dedicated boundary of the building's geofence.
9. Date(s) of meeting(s) with Client during the current milestone: 11/28/2022
10. Client feedback on the current milestone
    - The client is enthusiastic about the timeline implementation and awaits expansion of the content to include pictures and other media where applicable
    - Somewhat impressed with the periodic geolocation and active display of user location on the map; he is looking to see the generation of guided directions next.
    - Suggestions for tagging data to allow for filtering or "category tours" tailored to specific user demographics/interests.
11. Date(s) of meeting(s) with Faculty Advisor during the current milestone: 11/28/2022
12. Faculty Advisor feedback on each task for the current Milestone

- Trivia could pop in from the side as a panel to not make the user not need to navigate away from the homepage.
- Use address API to possibly get the latitude and longitude of the buildings on campus

13. Faculty Advisor Signature: _____ Date: _____