

**Central Connecticut State University
Department of Computer Science**

**Software Engineering Studio
Project Proposal**

Project Title:	Connecticut Explored's Scavenger Hunt App
Organization:	Connecticut Explored
Primary Contact:	[redacted]
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Phone:	

Background Information

Connecticut Explored is a quarterly magazine about Connecticut history that has been in print for 21 years. We also host a podcast, *Grating the Nutmeg*. We have 3700 subscribers to the magazine and hundreds of listeners to the podcast. We are trying to expand our digital presence, and we want to have more interactive engagement with the magazine.

Project Description

We would like to have an app focused on walking tours of places in Connecticut. Our magazine has articles that can be easily adapted to these tours. We would adapt the articles to accompany a map (short descriptions, instructions for walking, pictures from the articles). In order to make it interesting, we would like there to be a way for engaging those who do those tours to reconnect with the magazine. For example, after a person finds a particular point of interest, she could post a tagged picture of herself at the place on our Instagram. We would also like to have a little competitive element, such as a leaderboard where those who do the walks could accumulate points and we could offer a prize, like a bit of swag, when they reach a milestone. We also would like to have it free to magazine subscribers, but charge a small fee for non-subscribers.

There are sites that have history tours, like <https://www.historypin.org/en/> but it isn't adaptable to our needs. There are other apps that allow a person to create tours: <https://stqry.com>, but these too don't exactly meet our needs. We don't believe we need to reinvent the wheel. Google Maps could be a base. Old maps could complement the new map: <https://www.oldmapsonline.org/map/rumsey/4453.014>

Project Scope

There will need to be a system for creating the walking tour: adding points of interest with an area for description and a gallery of photos, as well as walking instructions, in an attractive and easily readable format. The app would be downloaded on a phone. We would like there to be elements of universal design (speech capability for those who are sight impaired, for example). It has to be easy to post to Instagram and load points to the leaderboard.

Project Challenges

The challenges will be finding the best way to create the app and making it easy to use while incorporating interesting features that link to Instagram and our website for the leaderboard.

Constraints & Assumptions

- Tours must be able to accommodate at least 10 points of interest. We assume 6-10 points of interest will be normal.
- There has to be room for some description for each point of interest. Since the tour will be an adaptation of a magazine article, we also need room for pictures.
- Tours should keep track of distance in miles and kilometers.
- Points for the leaderboard have to be calculated in a consistent way. It could be related to distance or number of sites.
- Posting to CTEexplored's Instagram should be easy.
- The "look" should be appropriate to a history site.
- There should be the ability to make it free to subscribers and paid for non-subscribers.
- There will need to be an administration access, and some way to provide our contact info.

Sponsor-Provided Hardware and Software

N/A

Sponsor and Project Specific Deliverables

- I would like the code uploaded to my github and any keys, passwords, or other access info.
- There should also be a maintenance plan so that updates don't break the system.
- I would like to be able to have at least one tour finished so it can be tested.

Proprietary Information

User data should be confidential so that only the admin and the user have access.