

Supplementary Specification

Version	Date	Description	Author
Inception Draft	Sept. 13, 2024	First draft. To be refined at a later date.	Iris Carrigg, Team Blue

Introduction

This document is the repository of all Cougar Hunt requirements not captured in use cases.

Functionality

(Functionality common across many use cases)

- *User authentication with CofC email*
- *Location logging and tracking*
- *Custom storylines*
- *Augmented Reality on Maps*

Usability

- *Easy-to-use User Interface to cater to college students of all backgrounds*
- *Accessibility features such as high contrast, on screen readers, etc.*
- *Prioritize device compatibility*

Reliability

- *Data backup to prevent interruption in game headway*
- *Able to operate properly while being used by a large amount of users*
- *Game progresses even with limited permissions (eg no location access)*

Performance

- *Loads quickly and prioritizes low battery usage*

Supportability

- *Admin can configure and add content to the game in order to allow storylines to adapt to changing university circumstances, holidays, etc.*
- *Admin will be able to view data on usage, and the app will regularly maintain security and address bugs.*

Reports

- *Admin will be able to view what locations, achievements, and storylines users follow*
- *User bug reports, crashes, etc*

Hardware and Software Constraints

- *The large number of users need to be able to be supported on a server*
- *Devices will need to be capable of supporting Augmented Reality (AR) functionality*
- *Operating Systems will have to be at a determined baseline level*

Development Constraints

- *Time is the biggest constraint as the developers only have a semester to complete the project*
- *Differences in OS between developers may cause conflicts*

Other Design and Implementation Constraints

- *The application will need access to student data so it will have to comply with several security requirements*
- *Due to time constraints, the application will potentially be developed with limited device compatibility to begin with*

Internationalization concerns (units, language)

- *English language and imperial measurement systems will be primary*
- *In the future, implementation of language choice and unit conversions for metric*

Documentation (user, installation, administration) and help

- *Integrated tutorials depending on user status (student or admin)*
- *FAQs, customer service, and training modules*

Licensing and other legal concerns

- *School logo may need to be licensed for use in the application*
- *Student data may have legal implications and require protections*
- *Users will need to accept terms and conditions*

Packaging

- *App Store, Google Play, and other compatible app retailers*

Standards (technical, safety, quality)

- *Quality will be addressed and assured before each iteration of the application*
- *Student data will need to be kept secure and private*

Physical Environment Concerns

- *Well-lit UI for brightness of outdoor sunlight*
- *Simple interface for weather conditions like rain, snow, cold, etc.*
- *Weather warnings near checkpoints for things like flooding*
- *Augmented Reality usage warnings to remind user to be aware of their surroundings*

Operational Concerns

- *Backups are done often, always after checkpoint achievements*

- *Errors are handled automatically with displayed UI from implemented error-handling and/or error reports to developers*
- *Updates deployed often*
- *Dynamic storylines to keep users engaged*

Application-specific domain rules

- *Considerations for:*
 - *Historical preservation*
 - *Student schedules*
 - *Campus safety*
 - *City laws and regulations*
 - *Student privacy*
 - *Local environment (construction, detours, weather, etc)*
- *CofC branding used legally and correctly (colors, logos, motos, etc.)*

Information in domains of interest

- *History of the campus, it's buildings, notable alumni, professors, important dates and events*
- *Charleston history*
- *General information on campus facilities and more*