## **Project Requirements:**

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ID Number: 1

Type: Functional

Description: App opens/usable URL

Rationale: Hunt functions don't matter if the app doesn't open.

Fit Criterion: N/A

Priority: 1

Dependencies: N/A

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ID Number: 2

Type: Functional, Usability

Description: User can create a scavenger hunt. After clicking "Create Hunt" and the user has entered the title and radius and difficulty level of the hunt, it will appear under their profile without any clues and inactive.

Rationale: A registered user should be able to create a hunt so they can add clues and be able to share that hunt with people for them to participate in.

Fit Criterion: Form should display Title, Radius, Group, and Difficulty Level fields.

Priority: 6

Dependencies: 1, 8

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ID Number: 3

Type: Functional, Look and Feel, Usability

Description: A list (or map) of all scavenger hunts with at least one clue within a radius will display.

Rationale: A user should be able to view a list (or a map of starting clues' pins) of all hunts they can

participate in.

Fit Criterion: Radius is 100 miles.

Priority: 3

Dependencies: 1, 22

ID Number: 4

Type: Functional, 4

Description: When close enough to a clue, it will display on the screen.

Rationale: A participant should be able to progress through the clues to complete the hunt.

Fit Criterion: Must be within 1 meter of the clue's pin.

Priority: 4

Dependencies: 1, 22

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ID Number: 5

Type: Functional, Usability

Description: Adding clues to a created hunt. A clue can contain the following: image, text, notes, URL, or first clue checkbox. If it is the first clue, the radius center will snap to that location.

Rationale: A registered user should be able to edit one of their created hunts and add/edit clues to make/change the content of a scavenger hunt.

Fit Criterion: A clue must contain at least one field.

Priority: 6

Dependencies: 1, 2, 8

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ID Number: 6

Type: Functional, Look and Feel, Usability

Description: Edit details for a hunt. The fields that can be changed are as follows: title and radius. They can also group clues in a radius.

Rationale: A registered user should be able to change the title, name, and radius of theirs hunts in case they want to add a clue outside the initial radius, come up with a better name, or want to change if it's a group hunt or not and how many groups if so.

Fit Criterion: Form should display Radius, Group, and Difficulty Level fields.

Priority: 6

Dependencies: 1, 2, 8

ID Number: 7

Type: Functional, Look and Feel, Usability

Description: Each hunt has a shareable link that can be opened to view the hunt.

Rationale: A user should be able to send a hunt to someone else that they either want to participate in the hunt or participate in the hunt with.

Fit Criterion: A hunt should display a "Share" button.

Priority: 6

Dependencies: 1

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ID Number: 8

Type: Functional, Usability, Security

Description: User can sign in.

Rationale: If a user is already registered, they should be able to sign in so they can access creating hunts or have their data saved.

Fit Criterion: Form will display the following fields: username and password. Password must be 8 characters and include at least one capital letter, one number, and a special character. Username cannot already exist.

Priority: 2

Dependencies: 1, 9

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ID Number: 9

Type: Functional, Usability

Description: User can create an account.

Rationale: If a user doesn't have an account and would like to make one so they can store data or make hunts.

Fit Criterion: Form will display the following fields: name, username, password, phone, terms and conditions consent, email, age, gender, and profile picture. The first five of which are required.

Priority: 2

Dependencies: 1

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Type: Functional, Look and Feel

Description: When a user starts a hunt, the base clue will display on their screen.

Rationale: The first clue displaying should not be based on location and therefore will always display.

Fit Criterion: N/A

Priority: 4

Dependencies: 1, 11

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ID Number: 11

Type: Functional, Look and Feel, Usability

Description: A user can click on a hunt and has the option to select "Start."

Rationale: A user should be able to participate in hunts.

Fit Criterion: Start button displays for each hunt when selected.

Priority: 4

Dependencies: 1, Usability

ID Number: 12

Type: Functional, Usability

Description: If the hunt is a group hunt, a user can have the option to join an existing group or start a new group. The user will be required to enter a group name and phone number.

Rationale: If a group of people want to do a hunt, they should be able to do it together on the app.

Fit Criterion: Form displays the Group Name field.

Priority: 8

Dependencies: 11

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ID Number: 13

Type: Functional, Usability

Description: If one person in a group is close enough to a clue, everyone with an account and signed in in the whole group receives the clue on their device.

Rationale: A group shouldn't have to rediscover clues.

Fit Criterion: One phone is close enough to a clue, the other is not but both receive the clue.

Priority: 8

Dependencies: 4, 8

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ID Number: 14

Type: Functional, Usability

Description: If there are multiple groups participating in a hunt and one finishes, the other groups are notified with the group number and rank (first, second, etc.).

Rationale: If a group doesn't want to continue the hunt after they've lost, they should know when someone else has won.

Fit Criterion: "Group 1 finished First!"

Priority: 8

Dependencies: 12

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ID Number: 15

Type: Functional, Look and Feel, Usability

Description: A list (or map) of all scavenger hunts that a registered user has completed and/or started and not completed within a radius will display.

Rationale: A registered user should be able to see all the hunts they have completed or the ones they can continue.

Fit Criterion: Radius is 100 miles.

Priority: 7

Dependencies: 8, 22, 11

Type: Functional, Usability

Description: When the final clue is found, the user is presented with the "Finish" button.

Rationale: A user should be able to complete a hunt.

Fit Criterion: Button is displayed

Priority: 4

Dependencies: 11

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ID Number: 17

Type: Functional, Look and Feel, Performance

Description: When a clue is found, the timestamp and the time between clues is recorded that clue.

Rationale: Users should be able to compare how long it took them to find certain clues.

Fit Criterion: Time is displayed in MMM DD HH:MM:SS format and time elapsed is in "XX minutes"

Priority: 8

Dependencies: 11

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ID Number: 18

Type: Functional, Usability, Performance

Description: A registered user has the option when creating clues to create sub-radii to group clues.

Rationale: The creator might want to give the participants an advantage.

Fit Criterion: Form will ask a range of clues to group and the radius in miles to group them under.

Priority: 8

Dependencies: 5

ID Number: 19

Type: Functional, Usability, Performance

Description: If participating in a group hunt, a user can see the real-time locations for each member of

participants.

Rationale: Group won't lose participants.

Fit Criterion: N/A

Priority: 8

Dependencies: 12, 22

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ID Number: 20

Type: Functional, Usability

Description: When a registered user is creating a group race, the user must create different clues, but the same number of clues per group and assign the trail of clues to a group number. The clue trails can include some or all the clues from a different trail but must be in a different order.

Rationale: That way one group can't just follow another.

Fit Criterion: N/A

Priority: 8

Dependencies: 5

ID Number: 21

Type: Functional, Usability

Description: When creating or editing a clue, a registered user can add notes or comments on the clue.

Rationale: The creator might want to remind the participants of a significant event between/among them or add historical facts, etc.

Fit Criterion: The form when adding/editing will display this field.

Priority: 6

Dependencies: 5

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ID Number: 22

Type: Functional, Usability, Performance

Description: Upon opening the app for the first time, the app will ask to use the device's location.

Rationale: The entire application is dependent on using the user's device's location.

Fit Criterion: Pop up displays

Priority: 1

Dependencies: 1

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ID Number: 23

Type: Functional, Performance

Description: The application will update the device's location after a certain amount of time.

Rationale: Needs to be extremely precise.

Fit Criterion: Time delay is every 1 second

Priority: 1

Dependencies: 1

ID Number: 24

Type: Functional, Security

Description: Only the app and people in a user's group can see their location.

Rationale: Security and privacy of the user is of the upmost importance.

Fit Criterion: Location firewall

Priority: 2

Dependencies: 1, 12

ID Number: 25

Type: Functional, Look and Feel

Description: A registered user can edit profile details: name, username, phone, terms and conditions

consent, email, age, and gender.

Rationale: Customizing a profile makes the user more likely to enjoy their experience.

Fit Criterion: Form displays all the fields above.

Priority: 7

Dependencies: 8

ID Number: 26

Type: Functional, Usability, Security

Description: A registered user can change their password.

Rationale: A user may want to change their password.

Fit Criterion: Password must be 8 characters and include at least one capital letter, one number, and a

special character.

Priority: 7

Dependencies: 8

ID Number: 27

Type: Functional, Usability, Security

Description: A registered user who has forgotten their password can reset it without logging in based on

phone number/email.

Rationale: Sometimes users forget their password.

Fit Criterion: Password must be 8 characters and include at least one capital letter, one number, and a

special character.

Priority: 2

Dependencies: 1

Type: Functional, Look and Feel, Usability

Description: A registered user that has made a hunt can toggle whether a scavenger hunt is active or not

(On/Off).

Rationale: The creator may not wish for the hunt to be used anymore.

Fit Criterion: Toggle switch works from on to off and back.

Priority: 6

Dependencies: 2

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ID Number: 29

Type: Functional, Look and Feel, Usability

Description: A registered user can delete a hunt from their history.

Rationale: A user may want to declutter what is listed on their map and list.

Fit Criterion: "Delete" button shows when viewing a hunt that has been participated in.

Priority: 5

Dependencies: 15

ID Number: 30

Type: Functional, Look and Feel, Usability

Description: If a registered user has paused a hunt, the hunt will remember which clues have been found.

Rationale: The user won't have to start over from the beginning.

Fit Criterion: N/A

Priority: 5

Dependencies: 32

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Type: Functional, Look and Feel, Usability

Description: If a registered user has started and not completed a hunt, user can pause the hunt.

Rationale: If a user wants to stop looking for clues but might want to resume the hunt at any given time.

Fit Criterion: "Pause" button displays when participating in a hunt.

Priority: 5

Dependencies: 11, 15

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ID Number: 32

Type: Functional, Look and Feel, Usability

Description: If a registered user has paused a hunt, user can resume the hunt.

Rationale: If a user wants to resume the hunt at any given time.

Fit Criterion: "Resume" button displays when viewing in a hunt.

Priority: 5

Dependencies: 11, 15