EIR
Requirements Specification

Group 2

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PRODUCT VISION

FOR global backcountry snowsport enthusiasts

WHO want accurate and efficient access to avalanche condition reports

THE EIR system is a Web-based service

THAT provides online/offline access to high quality and easy to understand maps, graphs, and avalanche information

UNLIKE other avalanche reporting websites restricted to specific regions

OUR product provides accessible information for many popular backcountry regions across the world to help ensure the safety of our users.

Feature

F1. The system can aggregate avalanche information from verified Third-Party Web Pages to be displayed on the Eir system.

Acceptance Criteria

GIVEN the system needs avalanche information to answer the request of a Site Visitor

WHEN the system does not have current avalanche information for the search

THEN the system will collect and process avalanche information for the Site Visitor to view.

User Stories

US1-1. As a Site Visitor, I want to view avalanche information aggregated from a Third-Party Web Page, so that I can make informed decisions about my backcountry excursions.

US1-2. As a Site Visitor, I want to see the most recent avalanche information, so that I know the reports are accurate to current conditions.

US1-3. As a Site Visitor, I want to see the date of when the reporting occurred, so that I can make a judgment on how accurate the avalanche information is.

US1-4. As a Site Visitor, I want to access the external webpage where the avalanche information came from, so that I know the source of the information.

Feature

F2. Site Visitors can search for specific regions.

Acceptance Criteria

GIVEN I am a Site Visitor who wants to see avalanche information for a specific region

WHEN I define a region

THEN I can view the avalanche information of the region that is presented to me.

User Stories

US2-1. As a Site Visitor, I want to search by mountain range, so that I can see avalanche information around that mountain range.

US2-2. As a Site Visitor, I want to search by trail, so that I can see avalanche information around that trail.

US2-3. As a Site Visitor, I want to search by city, so that I can see avalanche information around that city.

Feature

F3. Site Visitors can download avalanche information for offline use.

Acceptance Criteria

GIVEN I am a Site Visitor who wants to download avalanche information

WHEN I have stable internet connection and sufficient storage

THEN I can download avalanche information to view while offline.

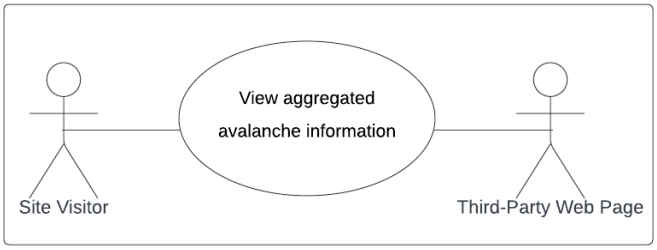
User Stories

US3-1. As a Site Visitor, I want to download avalanche information for a specific region, so that I can view it offline.

US3-2. As a Site Visitor, I want to select what information I download, so that I only download the information I want.

US3-3. As a Site Visitor, I want to download past information, so that I understand seasonal patterns better.

Use Cases for Feature 1



Use Case Name: View aggregated avalanche information

Related Requirements: US1-1 (Sebastian Carpenter, Shane Costello, Aidan Keefe)

Goal in Context: A Site Visitor can get aggregated avalanche information upon viewing a region.

Preconditions:

1) Site Visitor has an internet connection
2) Site Visitor wants to view a region's avalanche information

Successful End Condition: Site Visitor can view a region's avalanche information.

Failed End Condition: Site Visitor is unable to view a region's avalanche information.

Primary Actors: Site Visitor: a person who is interested in backcountry snowsports and chooses to use the Eir website.

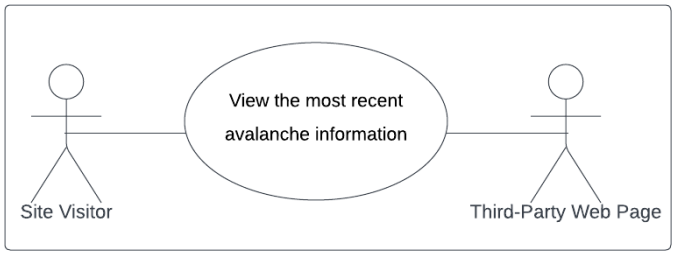
Secondary Actors: Third-Party Web Page: a website containing avalanche information chosen from a list of preset websites.

Trigger: Site Visitor wants to view a region's avalanche information.

Main Flow of Events:

1) Site Visitor decides to view a region's avalanche information

2) System determines what Third-Party Web Page to take the avalanche information from
3) System parses avalanche information from the Third-Party Web Page
4) System displays avalanche information
5) Site Visitor views avalanche information for their defined region



Use Case Name: View the most recent avalanche information

Related Requirements: US1-2 (Aidan Keefe)

Goal in Context: A Site Visitor can view the most recent avalanche information.

Preconditions:

1) The System has aggregated the most recent avalanche information from when the Third-Party Web Page was last updated
2) Site Visitor is viewing avalanche information

Successful End Condition: The Site Visitor can view the most recent avalanche information available.

Failed End Condition: The Site Visitor cannot view the most recent avalanche information available.

Primary Actors: Site Visitor: a person who is interested in backcountry snowsports and chooses to use the Eir website.

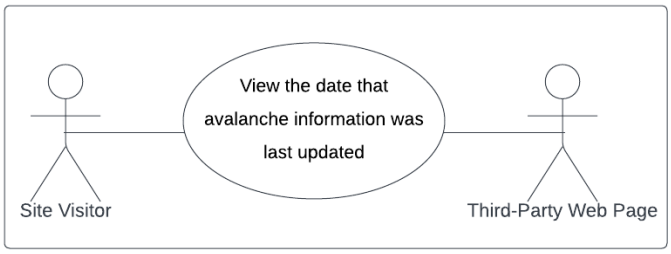
Secondary Actors: Third-Party Web Page: a website containing avalanche information chosen from a list of preset websites.

Trigger: The Site Visitor wants to see the most recent avalanche information.

Main Flow:

1) The system gathers avalanche information from a Third-Party Web Page

2) The system provides the information to the Site Visitor
3) The Site Visitor views the information presented



Use Case Name: View the date that avalanche information was last updated

Related Requirements: US1-3 (Seamus McKenny)

Goal in Context: When avalanche information is collected Site Visitors can view how recent the information is.

Preconditions:

1) A Site Visitor searches a region
2) The System aggregated avalanche information from a Third-Party Web Page
3) Site Visitor is viewing avalanche information

Successful End Condition: The Site Visitor can view how recent the avalanche information is according to the Third-Party Web Pages.

Failed End Condition: The Site Visitor can not view how recent the avalanche information is according to the Third-Party Web Pages.

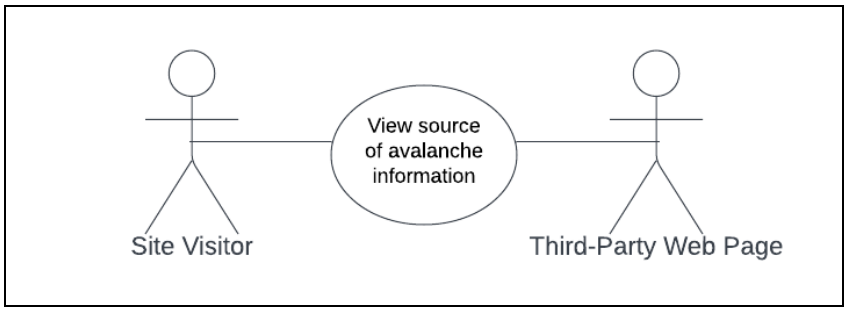
Primary Actors: Site Visitor: a person who is interested in backcountry snowsports and chooses to use the Eir website.

Secondary Actors: Third-Party Web Page: a website containing avalanche information chosen from a list of preset websites.

Trigger: The Site Visitor wants to see the date of when the avalanche information they are viewing was collected according to the Third-Party Web Page.

Main Flow of Events:

1) The system collects the date avalanche information was last processed from the Third-Party Web Page
2) The system provides the date to the Site Visitor
3) The Site Visitor views the date information was last updated



Use Case Name: View source of avalanche information

Related Requirements: US1-4 (Shane Costello)

Goal in Context: A Site Visitor can easily navigate to the Third-Party Web Page which provided the avalanche information.

Preconditions:

1) The system has aggregated avalanche information from a Third-Party Web Page
2) Site Visitor is viewing avalanche information

Successful End Condition: The Site Visitor is able to view the source of the avalanche information.

Failed End Condition: The Site Visitor is unable to view the source of the avalanche information.

Primary Actors: Site Visitor: a person who is interested in backcountry snowsports and chooses to use the Eir website.

Secondary Actors: Third-Party Web Page: a website containing avalanche information chosen from a list of preset websites.

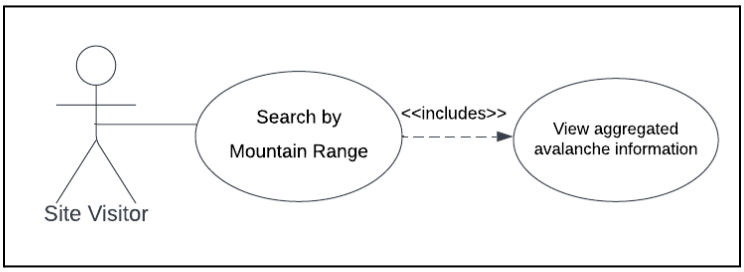
Trigger: The Site Visitor wants to see the source of the avalanche information they are viewing.

Main Flow of Events:

1) The system presents a link to the Third-Party Web Page
2) Site Visitor selects the link

3) Site Visitor access the Third-Party Web Page

Use Cases for Feature 2 User Stories



Use Case Name: Search by Mountain Range

Related Requirements: US2-1 (Sebastian Carpenter)

Goal in Context: A Site Visitor can search by mountain range to view the connected avalanche information.

Preconditions:

1) Site Visitor is using the search function on the Eir website
2) Site Visitor knows what mountain range they will search for

Successful End Condition: Site Visitor finds their mountain range.

Failed End Condition: Site Visitor does not find their mountain range.

Primary Actors: Site Visitor: a person who is interested in backcountry snowsports and chooses to use the Eir website.

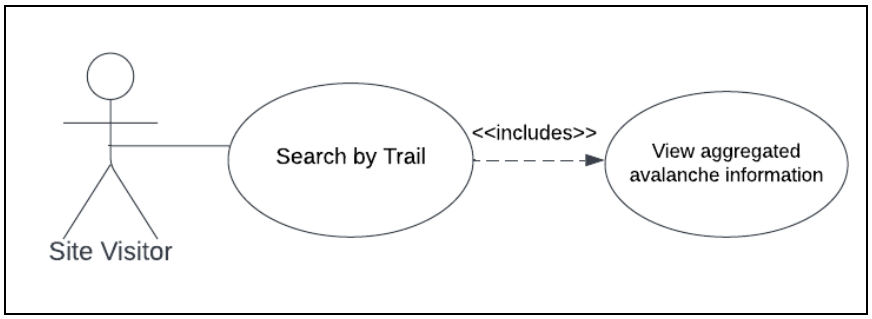
Secondary Actors: None

Trigger: Site Visitor wants to search for avalanche information connected to a mountain range.

Main Flow of Events:

1) System asks Site Visitor for a mountain range
2) Site Visitor provides mountain range
3) System searches for matching mountain range
   Include :: View aggregated avalanche information
4) System returns avalanche information connected to the mountain range

5) Site Visitor views the returned information



Use Case Name: Search by Trail

Related Requirements: US2-2 (Sebastian Carpenter)

Goal in Context: A Site Visitor can search by trail to find the connected avalanche information.

Preconditions:

1) Site Visitor is using the search function on the Eir website
2) Site Visitor knows what trail they will search for

Successful End Condition: Site Visitor finds their trail.

Failed End Condition: Site Visitor does not find their trail.

Primary Actors: Site Visitor: a person who is interested in backcountry snowsports and chooses to use the Eir website.

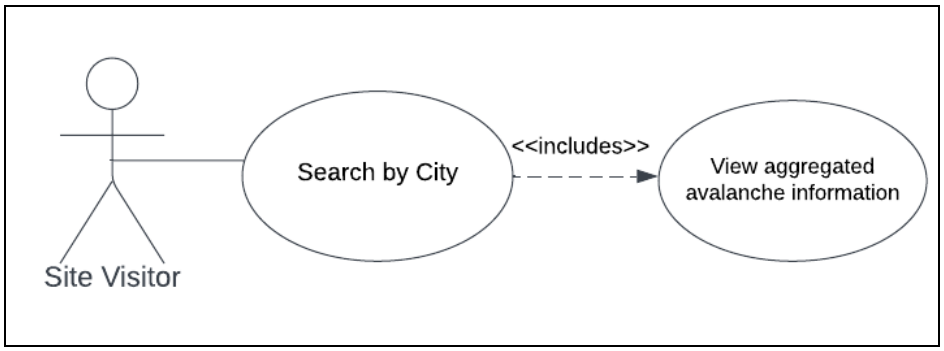
Secondary Actors: None

Trigger: Site Visitor wants to search for avalanche information connected to a trail.

Main Flow of Events:

1) System asks Site Visitor for a trail
2) Site Visitor provides trail
3) System searches for matching trail

   Include :: View aggregated avalanche information
4) System returns avalanche information connected to the trail
5) Site Visitor views the returned information



Use Case Name: Search by City

Related Requirements: US2-3 (Shane Costello)

Goal in Context: A Site Visitor can search by city to view the connected avalanche information of nearby mountain ranges.

Preconditions:

1) Site Visitor is using the search function on the Eir website
2) Site Visitor knows what city they will search for

Successful End Condition: Site Visitor finds their city.

Failed End Condition: Site Visitor does not find their city.

Primary Actors: Site Visitor: a person who is interested in backcountry snowsports and chooses to use the Eir website.

Secondary Actors: None

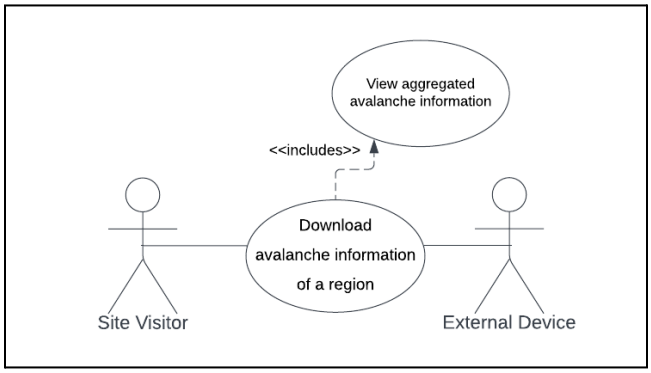
Trigger: Site Visitor wants to search for avalanche information nearby a city.

Main Flow of Events:

1) System asks user for a city
2) Site Visitor provides a city
3) System searches for matching city

   Include :: View aggregated avalanche information
4) System returns avalanche information nearby the city
5) The Site Visitor views the returned information

Use Cases for Feature 3 User Stories



Use Case Name: Download avalanche information of a region

Related Requirements: US3-1 (Aidan Keefe)

Goal in Context: A Site Visitor wants to access the avalanche information when they do not have internet access so they download it.

Preconditions:

1) The Site Visitor has an internet connection
2) The Site Visitor has selected a region

Successful End Condition: Avalanche information is saved to the Site Visitors device.

Failed End Condition: Avalanche information is not saved to the Site Visitors device.

Primary Actors: Site Visitor: a person who is interested in backcountry snowsports and chooses to use the Eir website.

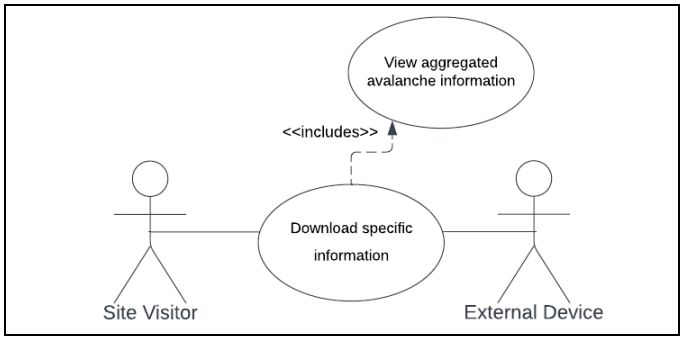
Secondary Actors: External Device : external device that the avalanche information will be saved to.

Trigger: The user wants to download avalanche information.

Main Flow of Events:

1) Site Visitor selects to download avalanche information of the region
   Include :: View aggregated avalanche information

2) The system sends the avalanche information to the users device
3) The avalanche information is saved to the user's device



Use Case Name: Download specific information

Related Requirements: US3-2 (Aidan Keefe)

Goal in Context: A Site Visitor does not want to download all of the avalanche information that is available. They can select exactly what they download.

Preconditions:

1) The Site Visitor has an internet connection
2) The Site Visitor has selected a region

Successful End Condition: the avalanche information they selected is downloaded.

Failed End Condition: the avalanche information they selected is not downloaded.

Primary Actors: Site Visitor: a person who is interested in backcountry snowsports and chooses to use the Eir website.

Secondary Actors: External Device : External device that the avalanche information will be downloaded to.

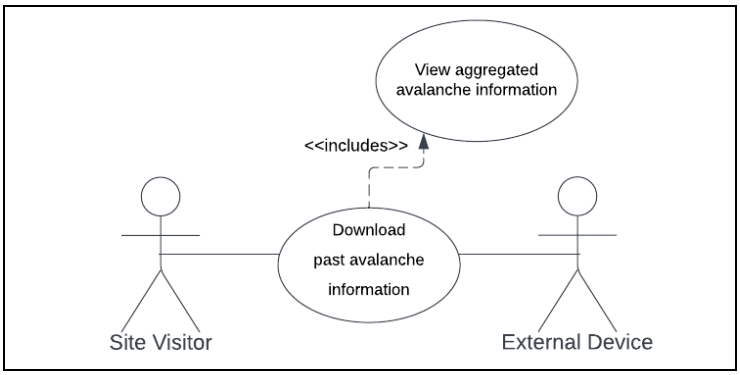
Trigger: The Site Visitor wants to be conscious of how much they download and want to use the avalanche information offline.

Main Flow of Events:

1) The Site Visitor selects what avalanche information they want to download

Include :: View aggregated avalanche information

2) The system sends the avalanche information to the users device
3) The avalanche information is downloaded to the user's device



Use Case Name: Download past avalanche information

Related Requirements: US3-3 (Aidan Keefe)

Goal in Context: The Site Visitor can download avalanche information from previous days and seasons.

Preconditions:

1) The Site Visitor has an internet connection
2) The Site Visitor has selected a region

Successful End Condition: The Site Visitor can download past avalanche information to their device.

Failed End Condition: The Site Visitor cannot download past avalanche information to their device.

Primary Actors: Site Visitor: a person who is interested in backcountry snowsports and chooses to use the Eir website.

Secondary Actors: External Device: external device that the avalanche information will be downloaded to.

Trigger: The Site Visitor wants to download avalanche information from a previou day or seasons.

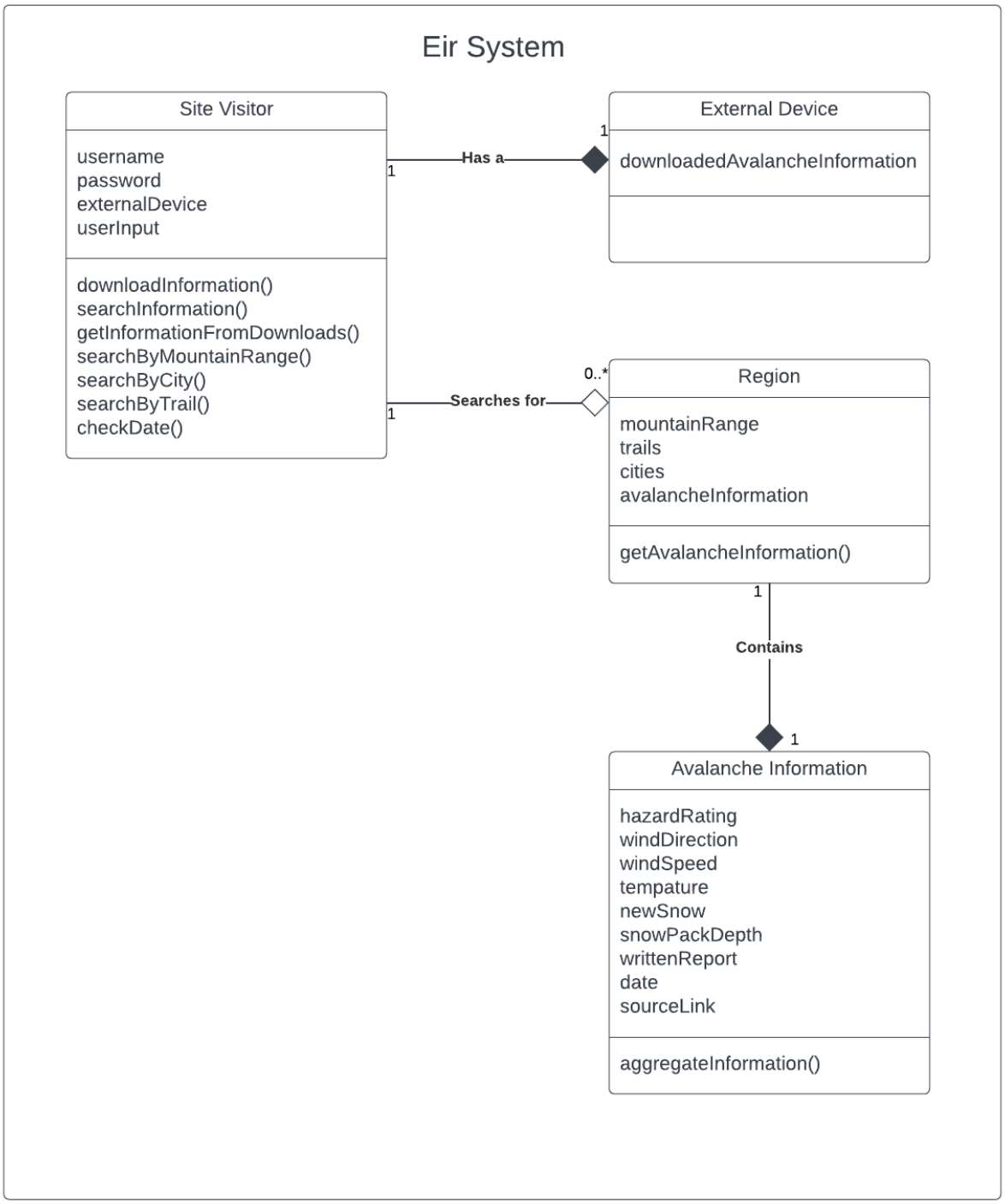
Main Flow of Events:

1) The Site Visitor selects the time frame of avalanche information to download

Include :: View aggregated avalanche information

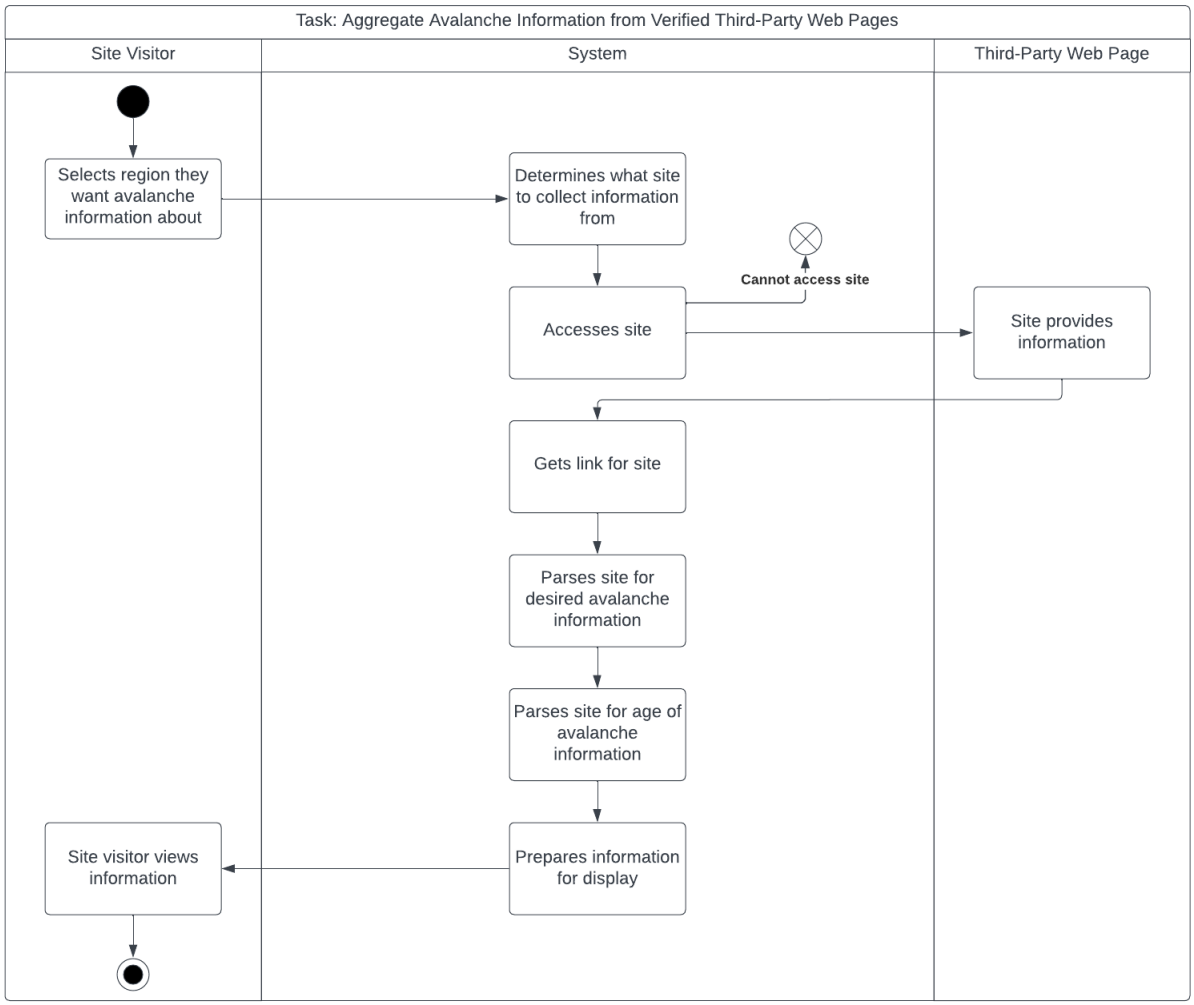
2) The system sends the avalanche information to the users device
3) The avalanche information is downloaded to the user's device

Class Diagram (Aidan Keefe, Shane Costello, Seamus McKenny, Sebastian Carpenter)

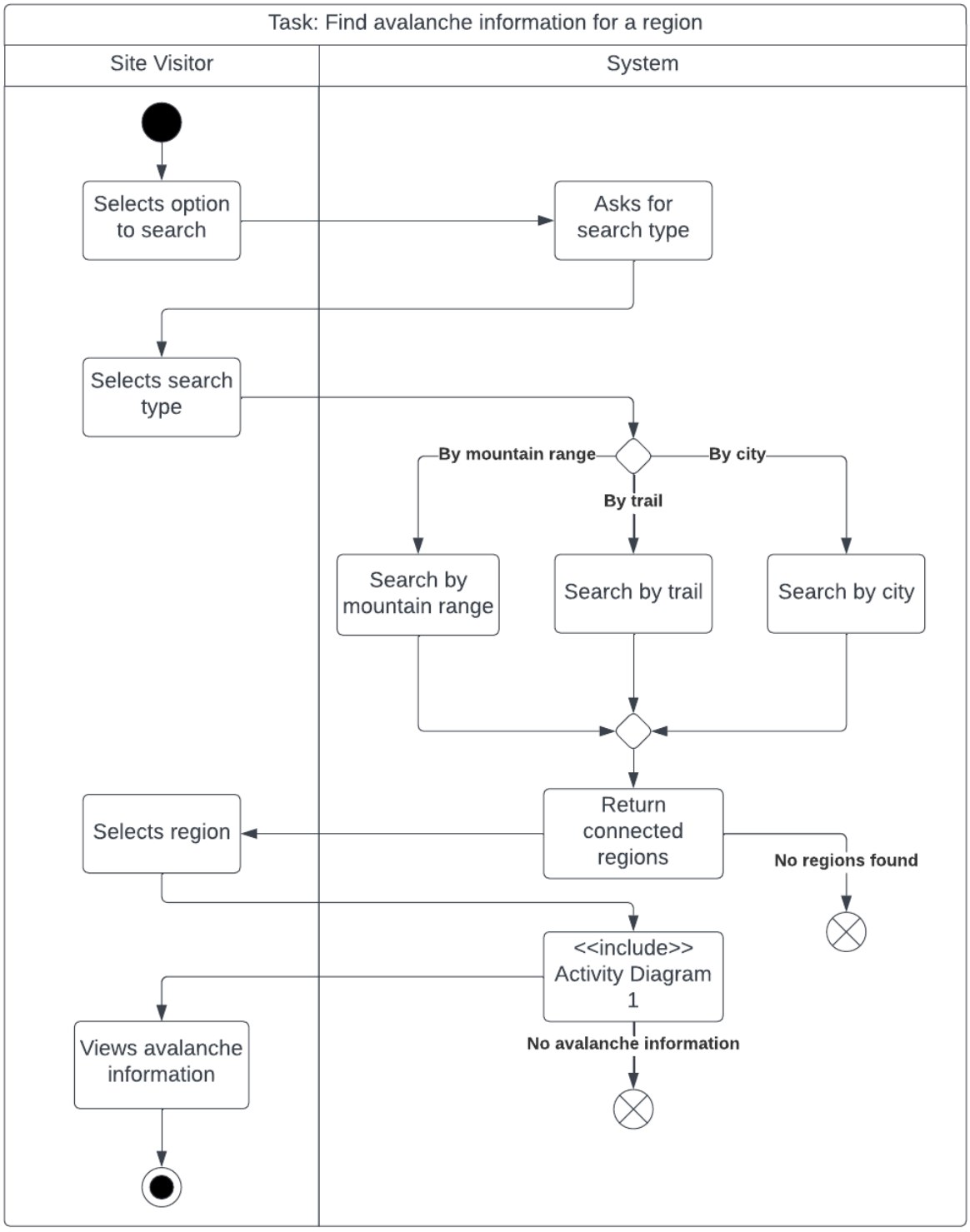


Activity Diagrams

Activity Diagram 1 Covers: US1-1, US1-2, US1-3, and US1-4 (Sebastian Carpenter)



Activity Diagram 2 Covers: US2-1, US2-2, and US2-3 (Sebastian Carpenter)



Activity Diagram 3 Covers: US3-1, US3-2, and US3-3 (Aidan Keefe)