CALAMITY: A Disaster Preparedness Application
Use Case Specification

Submitted to:

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Unique Reference:

The documents are stored in the https://github.com/geneaudrey/Disaster-Preparedness/tree/master/02-Requirements%20Engineering/Project%20Deliverables

referenced with Disaster Preparedness App - 2.1 - Play Earthquake Scenario.

Document Purpose:

The purpose of this document is to elaborate on certain use cases by identifying the pre-conditions, post-conditions, and flow of events of the use case. The flow of events will be further clarified using an activity diagram and the flow of data will be illustrated using an entity-relation diagram. The use case that will be presented in this document is the 2.1 - Play Earthquake Scenario.

Target Audience:

The following are part of the target audience:

• People who like or are interested in playing games

• People who have little to average knowledge on disaster preparedness, or people who would like to refresh their knowledge on disaster preparedness

• People who are interested in the development of the application

Revision Control:

Revision Date	Person Responsible	Version Number	Modification
09/20/19	Gene Tan	1.0	Initial Document Added Document Purpose, Target Audience
09/23/19	Nephia Dalisay	2.0	Added Use Case Name, Use Case Description, Preconditions Added Flow of Events Added Activity Diagram
09/23/19	Gene Tan	3.0	Added Entity-Relationship Diagram Added Relationships Modified postcondition and special requirements

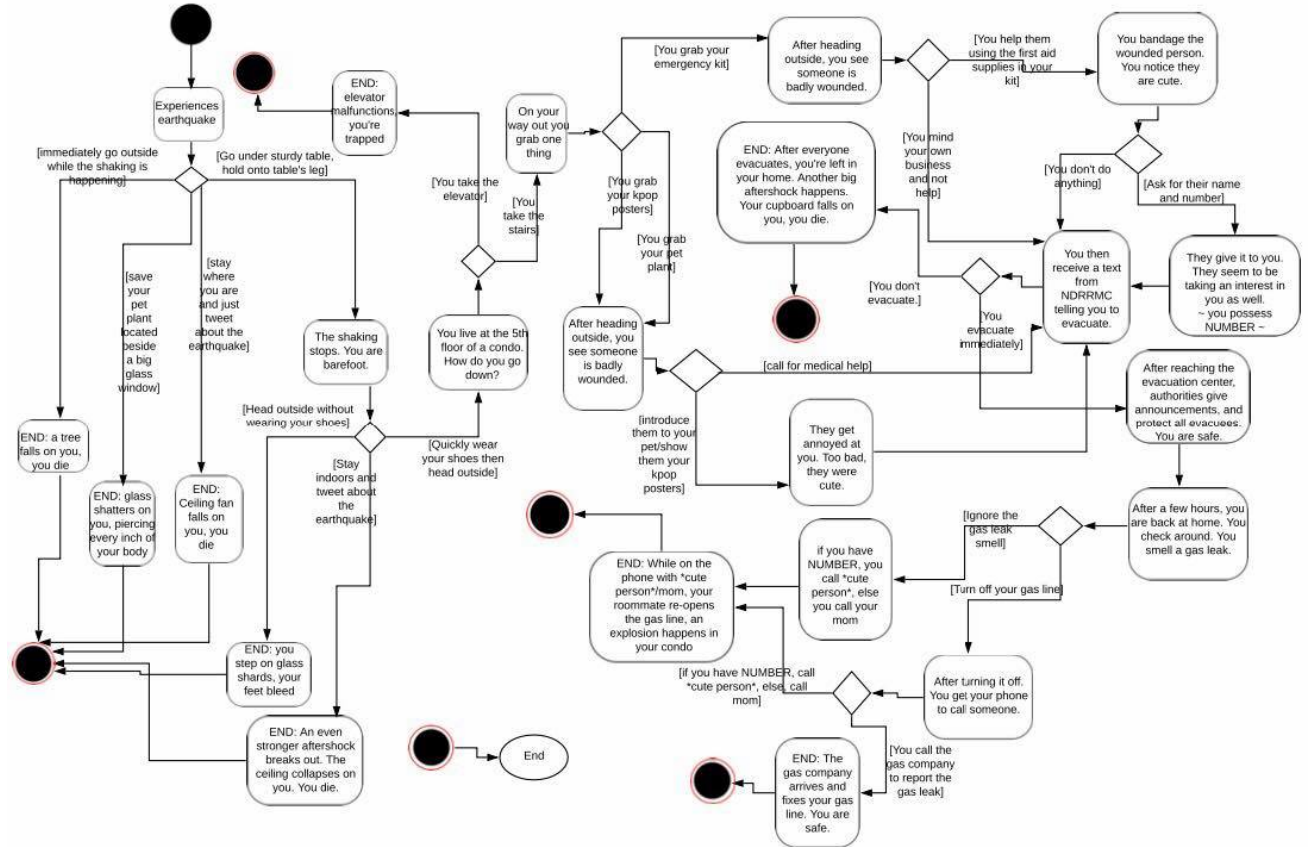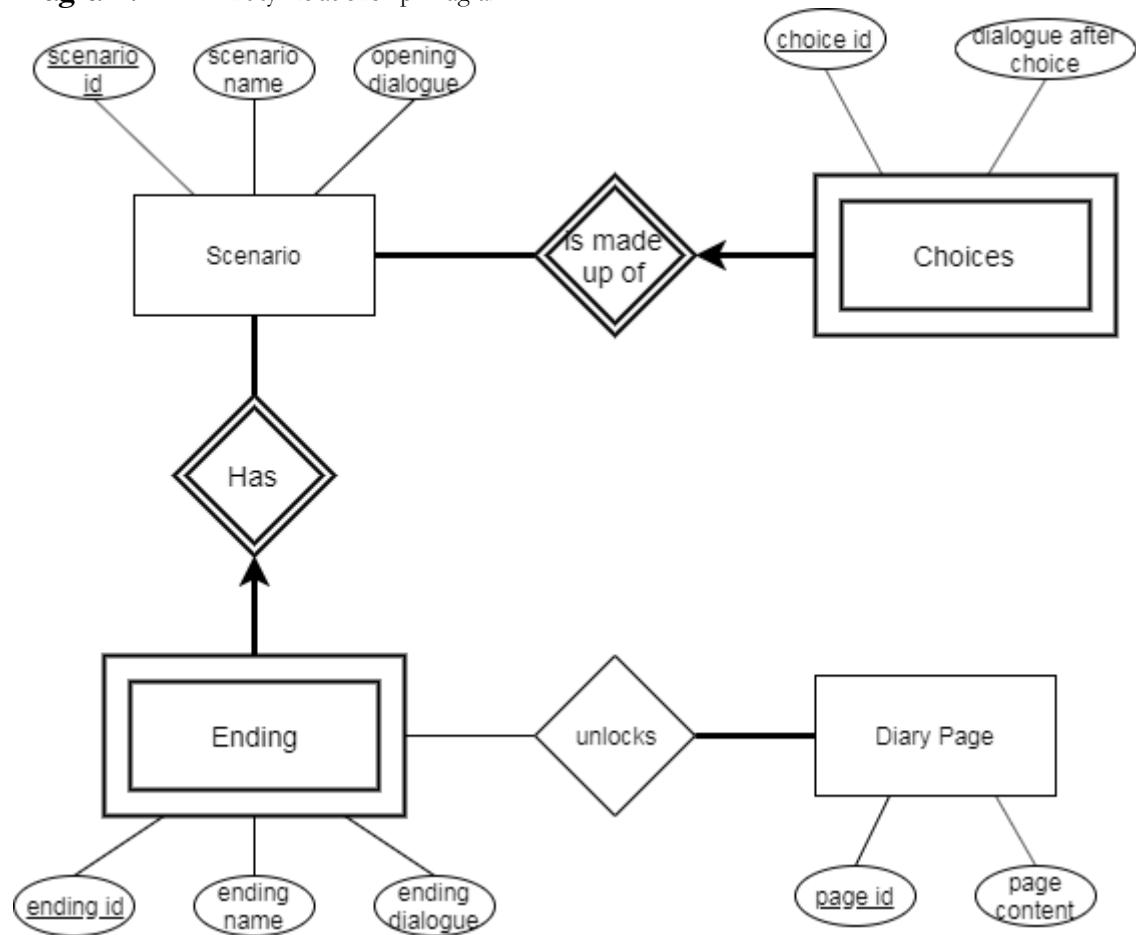|	
Use-Case Name:	2.1 Play Earthquake Scenario
Description:	This use-case allows the player to play the earthquake scenario. The player partakes the role of a college student that lives in the 5th floor of a condominium. A magnitude 6 earthquake breaks out, and the player is expected to make decisions that will either bring her to safety or to harm. The environment of the game will be inside the character's mobile phone. Certain decisions in the earthquake scenario will unlock corresponding diary pages.
Preconditions:	NONE

Flow of Events:

Scenario Name	Description
Scenario 1 (Basic Flow) Good Ending 1: Character is safe and got the number of *cute person*	1. As the earthquake happens, character follows DROP, COVER, and HOLD. 2. After the quake stops, character wears shoes and then heads outside. 3. On the way out, character grabs her emergency kit. 4. Character takes the stairs to go down the condominium. 5. Outside, character uses first aid supplies to help wounded person. 6. While bandaging the wounded person, character asks for their name and number. 7. After receiving NDRRMC announcing an evacuation, character evacuates immediately. 8. After a few hours, character is back at home. Character turns off gas line immediately after smelling leaked gas. 9. Character calls gas company to report leaked gas.
Scenario 2 Good Ending 2: Character is safe but doesn't have number of *cute person"	1. As the earthquake happens, character follows DROP, COVER, and HOLD. 2. After the quake stops, character wears shoes and then heads outside. 3. On the way out, character grabs her emergency kit. 4. Character takes the stairs to go down the condominium. 5. Outside, character doesn't help wounded person despite having first-aid supplies. 6. After receiving NDRRMC announcing an evacuation, character evacuates immediately. 7. After a few hours, character is back at home. Character turns off gas line immediately after smelling leaked gas. 8. Character calls gas company to report leaked gas.
Scenario 3 Good Ending 3: Character is safe but *cute person* gets annoyed at them	1. As the earthquake happens, character follows DROP, COVER, and HOLD. 2. After the quake stops, character wears shoes and then heads outside. 3. On the way out, character grabs her pet plant/kpop posters. 4. Character takes the stairs to go down the condominium. 5. Outside, character tries to help wounded person, but only has a pet plant/kpop posters to offer. 6. After receiving NDRRMC announcing an evacuation, character evacuates immediately. 7. After a few hours, character is back at home. Character turns off gas line immediately after smelling leaked gas. 8. Character calls gas company to report leaked gas.

Scenario Name	Description
Scenario 4 Bad Ending 1: Ceiling fan falls on character, character dies	1. As the earthquake happens, character doesn't mind, stays where she is, and then tweets about the earthquake.
Scenario 5 Bad Ending 2: Glass shatters on character, piercing every inch of her whole body	1. As the earthquake happens, character decides to save her pet plant located beside a big glass window.
Scenario 6 Bad Ending 3: A tree falls on character, character dies	1. As the earthquake happens, character immediately bolts outside.
Scenario 7 Bad Ending 4: Character steps on glass shards, character's feet bleed	1. As the earthquake happens, character follows DROP, COVER, and HOLD. 2. After the quake stops, character immediately heads outside without wearing shoes.
Scenario 8 Bad Ending 5: An even bigger aftershock occurs and the ceiling collapses on the character, character dies	1. As the earthquake happens, character follows DROP, COVER, and HOLD. 2. After the quake stops, character stays indoors and tweets about the earthquake.
Scenario 9 Bad Ending 6: Elevator malfunctions, character is trapped	1. As the earthquake happens, character follows DROP, COVER, and HOLD. 2. After the quake stops, character wears shoes and then heads outside. 3. On the way out, character grabs her pet plant/kpop posters. 4. Character takes the elevator to go down the condominium.
Scenario 10 Bad Ending 7: Another aftershock happens, a cupboard falls on character, character dies	1. As the earthquake happens, character follows DROP, COVER, and HOLD. 2. After the quake stops, character wears shoes and then heads outside. 3. On the way out, character grabs her pet plant/kpop posters. 4. Character takes the stairs to go down the condominium. 5. Outside, character tries to help wounded person, but only has a pet plant/kpop posters to offer. 6. After receiving NDRRMC announcing an evacuation, character doesn't evacuate and goes back to her condominium.
Scenario 11 Bad Ending 8: Roommate re-opens gas line, explosion happens	1. As the earthquake happens, character follows DROP, COVER, and HOLD. 2. After the quake stops, character wears shoes and then heads outside. 3. On the way out, character grabs her emergency kit. 4. Character takes the stairs to go down the condominium. 5. Outside, character doesn't help wounded person despite having first-aid supplies. 6. After receiving NDRRMC announcing an evacuation, character evacuates immediately. 7. After a few hours, character is back at home. Character turns off gas line immediately after smelling leaked gas. 8. Character doesn't call gas company and instead calls *cute person*
Scenario 12 Player doesn't finish the scenario	1. The story won't progress 2. The player won't be able to unlock diary pages. 3. The player won't be able to proceed to the other scenarios.

Activity Diagram of the Flow of Events:

Experiences earthquake

[immediately go outside while the shaking is happening]

[Go under sturdy table, hold onto table's leg]

END: elevator malfunctions, you're trapped

On your way out you grab one thing

[You grab your emergency kit]

After heading outside, you see someone is badly wounded.

[You help them using the first aid supplies in your kit]

You bandage the wounded person. You notice they are cute.

[save your pet plant located beside a big glass window]

[stay where you are and just tweet about the earthquake]

[You take the elevator]

[You take the stairs]

[You grab your kpop posters]

[You grab your pet plant]

END: After everyone evacuates, you're left in your home. Another big aftershock happens. Your cupboard falls on you, you die.

[You mind your own business and not help]

[You don't do anything]

[Ask for their name and number]

END: a tree falls on you, you die

[stay where you are and just tweet about the earthquake]

The shaking stops. You are barefoot.

You live at the 5th floor of a condo. How do you go down?

After heading outside, you see someone is badly wounded.

[You don't evacuate.]

You then receive a text from NDRRMC telling you to evacuate.

They give it to you. They seem to be taking an interest in you as well. ~ you possess NUMBER ~

END: glass shatters on you, piercing every inch of your body

END: Ceiling fan falls on you, you die

[Head outside without wearing your shoes]

[Quickly wear your shoes then head outside]

[introduce them to your pet/show them your kpop posters]

[call for medical help]

They get annoyed at you. Too bad, they were cute.

[You evacuate immediately]

After reaching the evacuation center, authorities give announcements, and protect all evacuees. You are safe.

[Stay indoors and tweet about the earthquake]

END: you step on glass shards, your feet bleed

END: While on the phone with *cute person*/mom, your roommate re-opens the gas line, an explosion happens in your condo

if you have NUMBER, you call *cute person*, else you call your mom

[Ignore the gas leak smell]

After a few hours, you are back at home. You check around. You smell a gas leak.

[Turn off your gas line]

[if you have NUMBER, call *cute person*, else call mom]

After turning it off. You get your phone to call someone.

END: An even stronger aftershock breaks out. The ceiling collapses on you. You die.

End

END: The gas company arrives and fixes your gas line. You are safe.

[You call the gas company to report the gas leak]

Other Diagram: Entity-Relationship Diagram

Postcondition: NONE

Relationships:

1. has — each scenario has one or more endings and each ending may only be connected to one scenario (i.e.: an ending in the fire scenario won't be seen in the earthquake scenario)
   - weak entity relationship between scenario and ending

2. is made up of — each scenario is made up of one or more choices and each choice may only be connected to one scenario (i.e.: a choice in the fire scenario won't be seen in the earthquake scenario)
   - weak entity relationship between scenario and choices

3. unlocks — endings may or may not unlock one or multiple diary pages and diary pages can be unlocked by a minimum of one ending

Special Requirements:
   NONE