CALAMITY: A Disaster Preparedness Application
Use Case Specification

Submitted to:

Asst. Prof. Ma. Rowena C. Solamo
Faculty Member
Department of Computer Science
College of Engineering
University of the Philippines, Diliman

Submitted by:
Dalisay, Nephia Bianca
Tan, Gene Audrey
Wee, Filbert Heinrich

In partial fulfillment of academic requirements
for the course
CS 191 Software Engineering I
of the
1st Semester, AY 2019-2020

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 - 2.2 - Play Fire 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 2.2 - Play Fire 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, Use Case Name, Use Case Description, Preconditions
09/22/19	Gene Tan	2.0	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: 2.2 Play Fire Scenario

Description: This use-case allows the player to play the fire scenario. More specifically, it allows the player to make decisions to save his/ her friend who finds himself in a burning building. The story starts off with the player chatting with his friend through a messaging app. In the middle of their conversation, the player's friend starts smelling smoke. Certain decisions in the fire scenario will unlock corresponding diary pages.
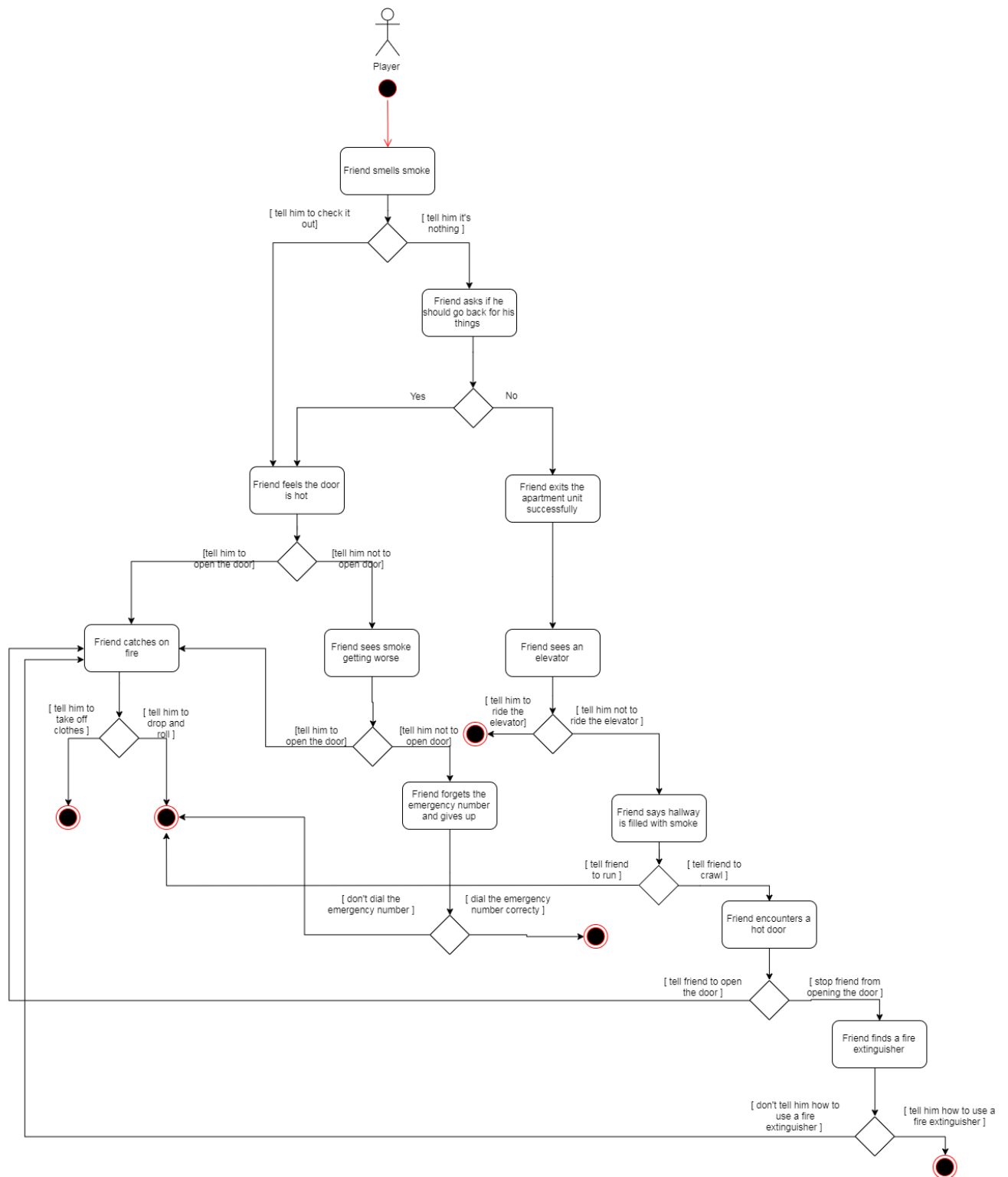
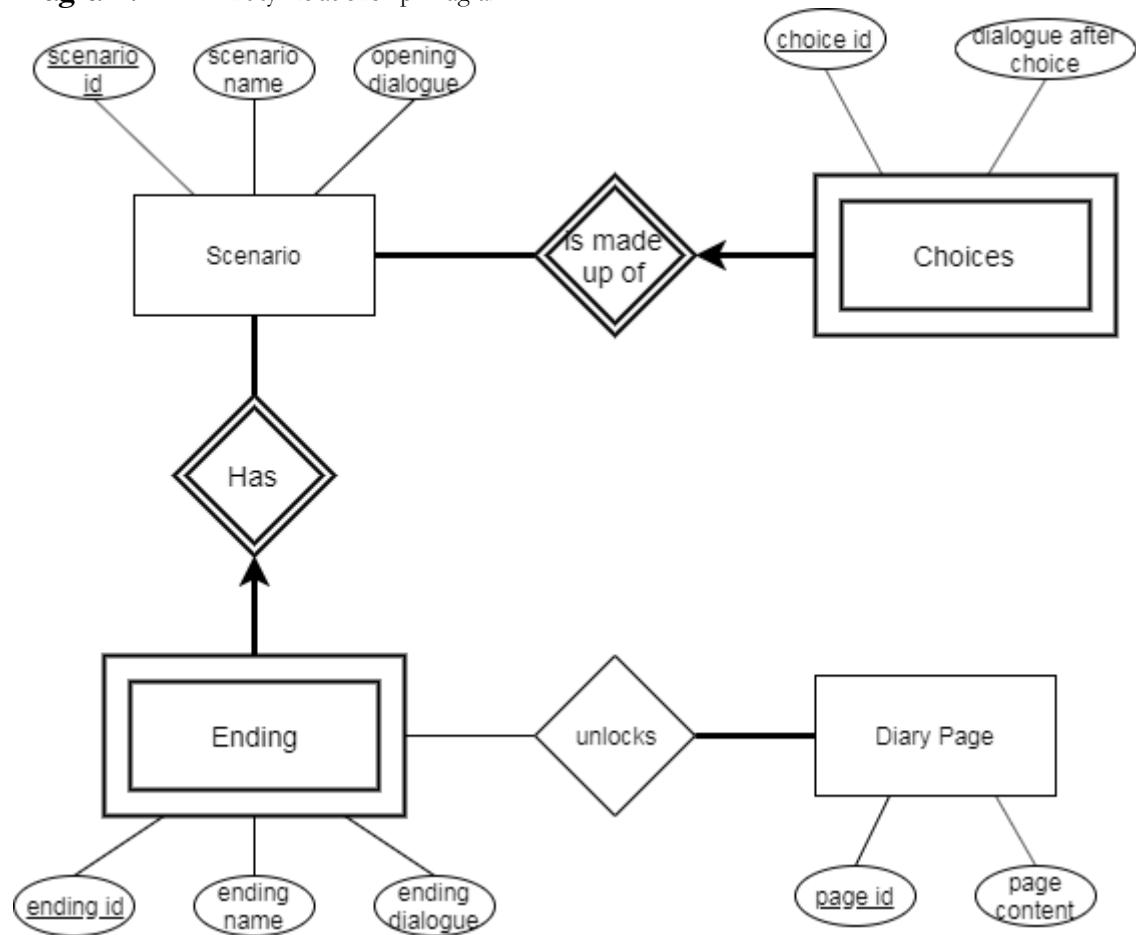**_Preconditions:_**   Player must finish the earthquake scenario first

Flow of Events:

Scenario Name	Description
Scenario 1 (Basic Flow) Good Ending 1: Character saves the kid and gets out of the building successfully	1. Player decides to tell his friend to check if something might be burning. 2. Player tells his friend to grab any wet cloth and find an exit immediately. 3. Friend successfully exits his apartment unit. 4. Player tells his friend not to use the elevator and find the fire exit. 5. Player tells his friend to crawl and cover his nose instead of making a run for it. 6. Friend hears a kid screaming for help and decides to save the kid. 7. Player tells his friend to wait before opening a hot door. 8. Player successfully tells his friend how to use a fire extinguisher (pull, aim, squeeze, sweep)
Scenario 2 Good Ending 2: Character gets saved by the firefighters	1. Player doesn't tell his friend to check if something might be burning and/or tells his friend to go back for his laptop and ipad. 2. Player stops his friend from opening the hot door. 3. Player tells his friend to cover all openings instead of dashing out of the room. 4. Player tells his friend to get far away from the fire and to close the doors behind him. 5. Player successfully dials the emergency hotline for fires. 6. Player tells his friend to open his window and wave something bright.
Scenario 3 Bad Ending 1: Character dies by getting badly injured.	1. Player doesn't tell his friend to check if something might be burning and/or tells his friend to go back for his laptop and ipad. 2. Player doesn't stop his friend from opening the hot door. 3. Friend catches on fire. 4. Player tells friend to take off his clothes instead of dropping and rolling. 5. Friend gets badly injured.
Scenario 4 Bad Ending 2: Character dies by inhaling too much smoke.	1. Player doesn't tell his friend to check if something might be burning and/or tells his friend to go back for his laptop and ipad. 2. Player doesn't stop his friend from opening the hot door. 3. Friend catches on fire. 4. Player tells friend to drop and roll. 5. Smoke starts to get worse and rapidly fills the room. 6. Friend inhales too much smoke and faints.

Scenario Name	Description
Scenario 5 Bad Ending 2: Character dies by inhaling too much smoke. (Alternative way of getting bad ending 2)	1. Player chats with his friend through a messaging app. 2. Player's friend starts smelling smoke. 3. Player doesn't tell his friend to check if something might be burning or (not and) player tells his friend to go back for his laptop and ipad. 4. Player stops his friend from opening the hot door. 5. Player tells his friend to cover all openings instead of dashing out of the room. 6. Player tells his friend to get as far away from the fire and to close the doors behind him. 7. Player fails to call the emergency hotline for fires. 8. Friend inhales too much smoke and dies.
Scenario 6 Bad Ending 2: Character dies by inhaling too much smoke. (Alternative way of getting bad ending 2)	1. Player chats with his friend through a messaging app. 2. Player's friend starts smelling smoke. 3. Player decides to tell his friend to check if something might be burning. 4. Player tells his friend to grab any wet cloth and find an exit immediately. 5. Friend successfully exits his apartment unit. 6. Player tells his friend not to use the elevator and find the fire exit. 7. Player tells his friend to make a run for it. 8. Friend inhales too much smoke and faints before reaching the fire exit.
Scenario 7 Bad Ending 2: Character dies by inhaling too much smoke. (Alternative way of getting bad ending 2)	1. Player chats with his friend through a messaging app. 2. Player's friend starts smelling smoke. 3. Player decides to tell his friend to check if something might be burning. 4. Player tells his friend to grab any wet cloth and find an exit immediately. 5. Friend successfully exits his apartment unit. 6. Player tells his friend not to use the elevator and find the fire exit. 7. Player tells his friend to crawl and cover his nose instead of making a run for it. 8. Friend hears a kid screaming for help and decides to save the kid. 9. Player tells his friend to wait before opening a hot door. 10. Player fails to tell his friend how to use a fire extinguisher (pull, aim, squeeze, sweep)
Scenario 8 Bad Ending 3: Character gets stuck in the elevator and dies by inhaling too much smoke.	1. Player chats with his friend through a messaging app. 2. Player's friend starts smelling smoke. 3. Player decides to tell his friend to check if something might be burning. 4. Player tells his friend to grab any wet cloth and find an exit immediately. 5. Friend successfully exits his apartment unit. 6. Player tells his friend not use the elevator. 7. Friend gets stuck in the elevator and gets light headed after waiting for a while. 8. Firefighters arrive but they have trouble opening the elevator and it becomes too late for the friend.
Scenario 9 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:

Player

Friend smells smoke

[tell him to check it out]   [tell him it's nothing]

Friend asks if he should go back for his things

Yes   No

Friend feels the door is hot

Friend exits the apartment unit successfully

[tell him to open the door]   [tell him not to open door]

Friend catches on fire

Friend sees smoke getting worse

Friend sees an elevator

[tell him to take off clothes]   [tell him to drop and roll]

[tell him to ride the elevator]   [tell him not to ride the elevator]

[tell him to open the door]   [tell him not to open door]

Friend forgets the emergency number and gives up

Friend says hallway is filled with smoke

[tell friend to run]   [tell friend to crawl]

[don't dial the emergency number]   [dial the emergency number correcty]

Friend encounters a hot door

[tell friend to open the door]   [stop friend from opening the door]

Friend finds a fire extinguisher

[don't tell him how to use a fire extinguisher]   [tell him how to use a fire extinguisher]

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