

## OOP CA1: PROJECT PROPOSAL (GROUP E)

**SDG Goal:** 11 - Sustainable Cities and Communities.

**Project Idea:** Our application is called SafeWorld. It focuses on Disaster Risk Reduction (DRR), one of the relevant topics of SDG's Goal number 11. We create quizzes to educate users about potential disasters specifically in Ireland, help users assess the level of risks in their neighborhood, and provide means of support during and after a disaster.

Name	Student Number	Course Title	Role
Hong Nhung Nguyen	23395061	BSHDS2	Section 1: LearnSafe – Educate users about different types of disasters
Namuun Nergui	23423293	BSHDS2	Section 2: PlanSafe - Assess local risks and help users create emergency plan
Stefany Moraes Bento	23327456	BSHDS2	Section 3: ActSafe – Support users during and after disasters

### Functionality of Each Section:

#### Section 1: LearnSafe

- Account creation: Users can create their accounts with a username and password so that their learning progress is saved.
- Quizzes: Each quiz presents important information about a disaster; after that, users will complete a quiz to test their knowledge. If they pass, they will achieve a certificate.
- Information Storage: Users can check their account details, learning progress, and any obtained certificates.

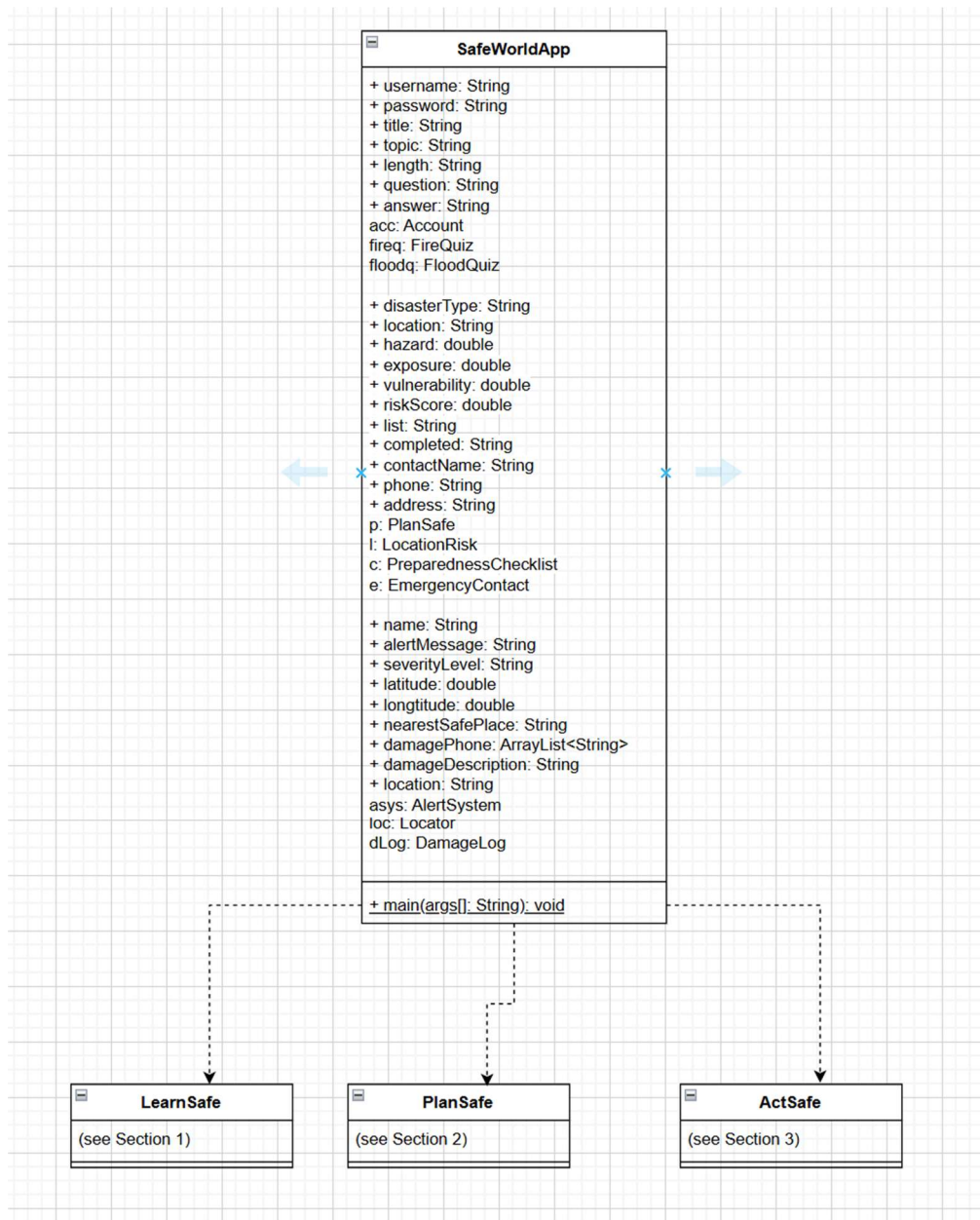
#### Section 2: PlanSafe

- Risk Assessment: User can know the risk level of their location by providing the relevant data the app asked.
- Preparedness checklist: Recommend suitable preparedness actions to users, as well as allow them to create, customize and track their checklist to be ready when a disaster occurs.
- Emergency contact: User can view and save the contact details of hospitals, fire stations or their close people who can they contact to when it is emergency.

#### Section 3: ActSafe

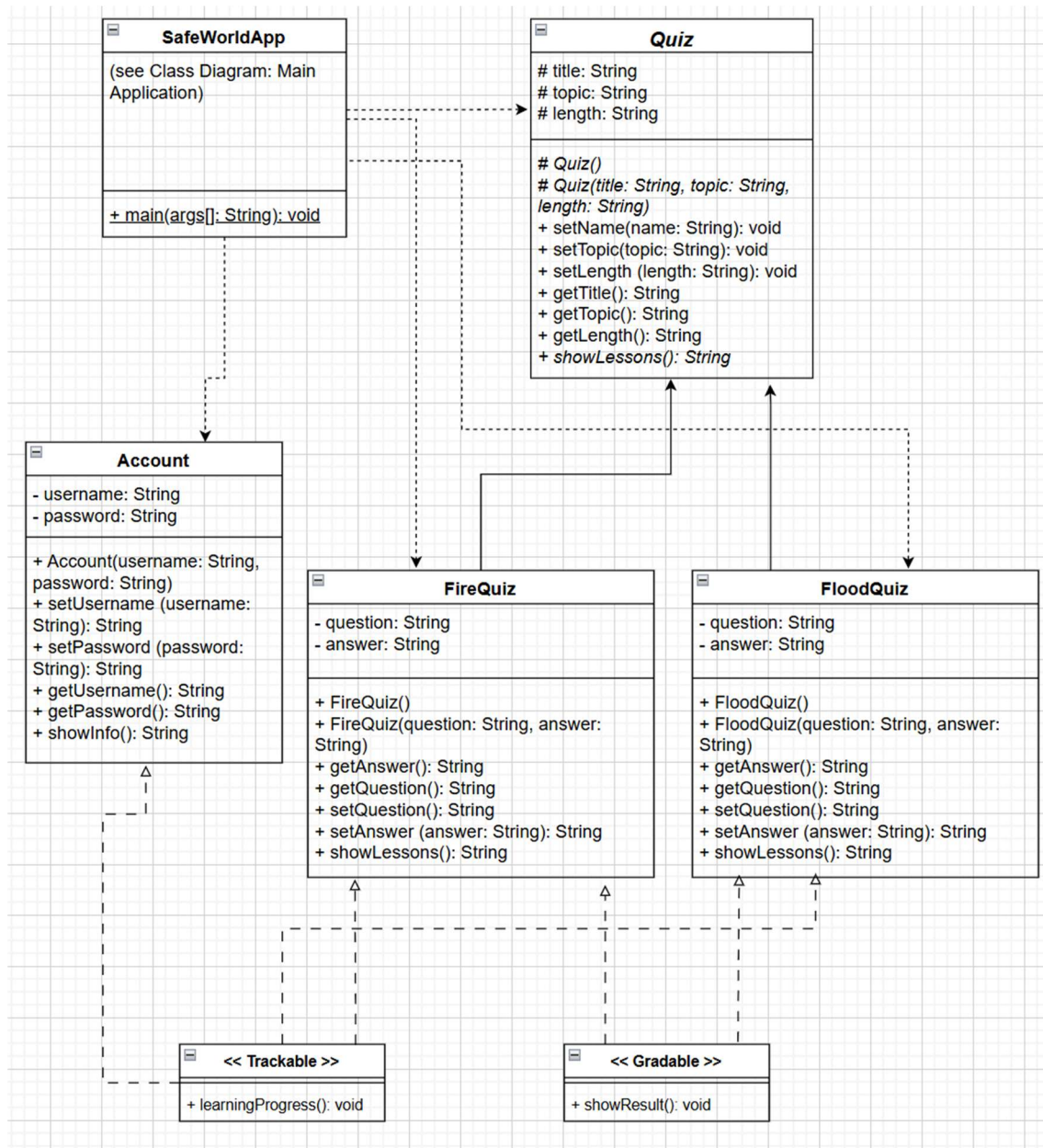
- Alert System: The user receives in-app notifications when severe weather conditions are detected, and the alerts tell the user about potential dangers weather conditions
- Locator: Take permission from users to access the users' location to show the nearest safe place on the map based on the user's current location.
- Damage Log: Take input from the user's as a report describing the disaster damage. They can upload photos and text descriptions that will be stored in a database for future reference and analysis.

## CLASS DIAGRAM: MAIN APPLICATION



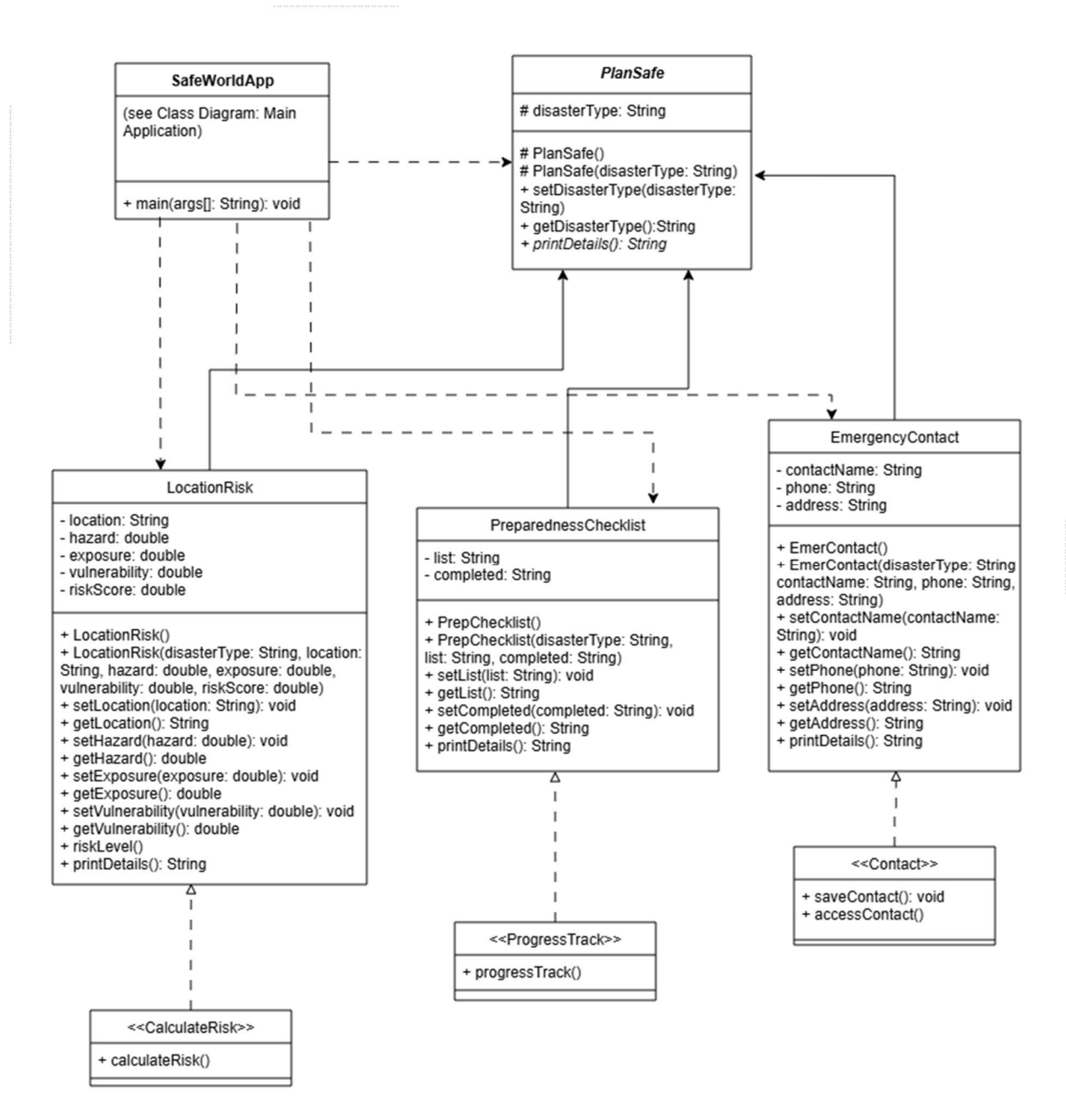
## CLASS DIAGRAM: SECTION 1 – LearnSafe

Hong Nhung Nguyen (Student Number: 23395061)



## CLASS DIAGRAM: SECTION 2 – PlanSafe

Namuun Nergui (Student Number: 23423293)



## CLASS DIAGRAM: SECTION 3 – ActSafe

Stefany Moraes Bento (Student Number: 23327456)

