

EXERCISE week Module 9-12

<https://github.com/ADirin/LectureExerModule9-11.git>

In Finland, people have a wide range of interests, participate in various events, and may have complex social connections. Your task is to create an advanced program using object-oriented programming that models Finnish citizens, their interests, events, and relationships.

Class 1: InFinland

- Include attributes such as name, age, city, Hobbies (a list of Hobbies they pursue), and eventsAttending (a list of events they plan to attend).
- Implement methods for adding and removing Hobbies and events, as well as for Retrieving this information.

Class 2: Hobby

- Create a class Hobby to represent hobbies pursued by In_Finland.
- Include attributes such as name, description, and relatedEquipment.
- Implement methods for associating In_finland with hobbies and retrieving hobby-related information.

Class 3: Event

- Create a class Event to represent events happening in Finland.
- Include attributes such as name, date, location, and participants (a list of citizens attending the event).
- Implement methods for adding and removing participants, as well as for retrieving event-related information.

Class 4: SocialNetwork

- Create a class SocialNetwork to represent the social connections among Finnish citizens.
- Implement a system that allows citizens to follow each other or have friends.
- Create methods to retrieve a citizen's friends or followers.

Requirements:

1. Establish suitable associations between the classes. Ensure that each FinnishCitizen can have multiple hobbies, attend multiple events, and have social connections with other citizens.
2. Implement validation checks where appropriate, such as ensuring that citizens can participate in events and that events can have participants within certain age groups.
3. Develop a comprehensive sample program that enables users to create, modify, and retrieve information about citizens, their hobbies, events, and social connections. The program should also allow users to explore how citizens' interests relate to events they attend and with whom they interact socially.