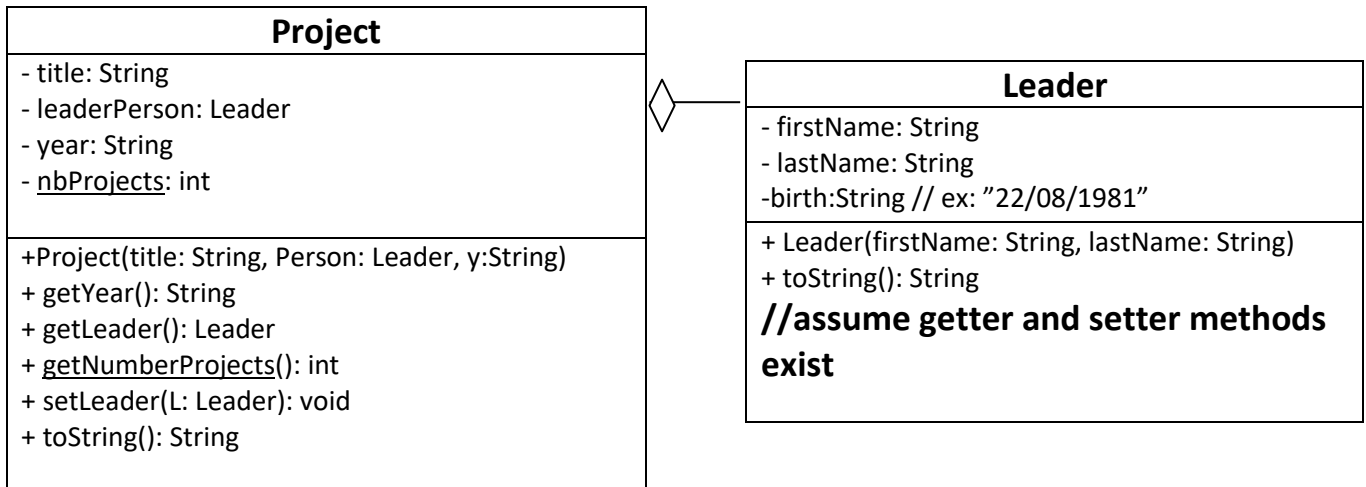


Exercise

Consider the two classes represented in the following UML diagram.



- 1) Implement the class **Leader [60pts]**. Assume getter and setter methods exist.
 - *toString* method return a string that describes the Leader. For example, a leader having first name "sami", last name "dupon", it returns:

[The leader name is Sami Dupon]

- 2) Implement the class **Project [20 pts]**.
 - The attribute nbProjects keeps track of the number of projects created.
 - The *toString* method returns a string description of the project. For example, for the project with title "Process Automation" and Leader "Sami Dupon", it returns:

Project: Process Automation, Created in 2016, Leader: [The leader name is Sami Dupon]

- 3) In the driver class, write the code to **[40 pts]**:
 - a. Create an array of projects of size 10. Fill the **first** project in the array with values **from the programmer**. Assume the rest objects exist in the array [5 pts]
 - b. Display the number of projects created in 2016. [10 pts]
 - c. Set the leader of the last project in the array to "Sara Farid, born in 15/07/1989". [10 pts]
 - d. Display a full description of all the projects having leaders born in "1981". [10 pts]
 - e. Display a full description of all the projects. [5 pts]