



# Case Study: UAMS Solution



# Identify the Classes

Academic branch offers different programs within different departments each program has a degree title and duration of degree.

Student Apply for admission in University and provides his/her name, age, FSC, and Ecat Marks and selects any number of preferences among the available programs.

Admission department prepares a merit list according to the highest merit and available seats and registers selected students in the program.

Academic Branch also add subjects for each program. A subject have subject code, credit hours, subjectType, and subjectFee A Program cannot have more than 20 Credit hour subjects. A Student Registers multiple subjects but only from his enrolled program's subject but he/she can not take more than 9 credit hours.

Fee department generate fees according to registered subjects of the students.

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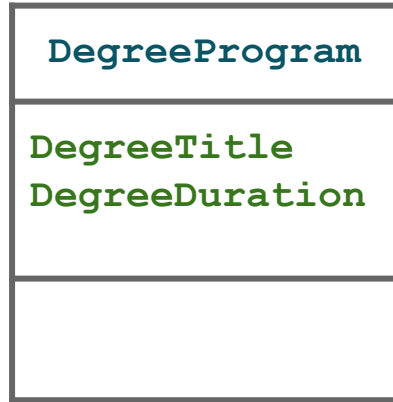
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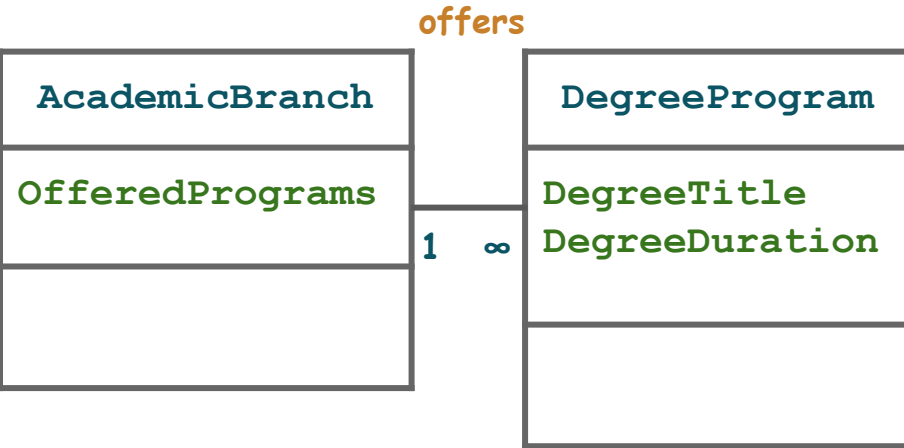
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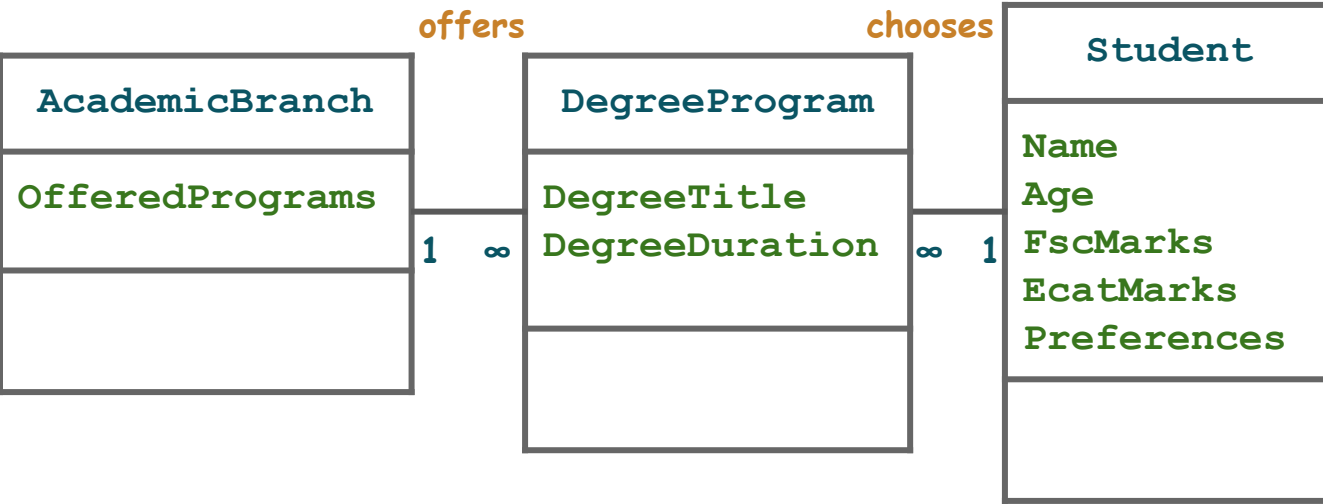
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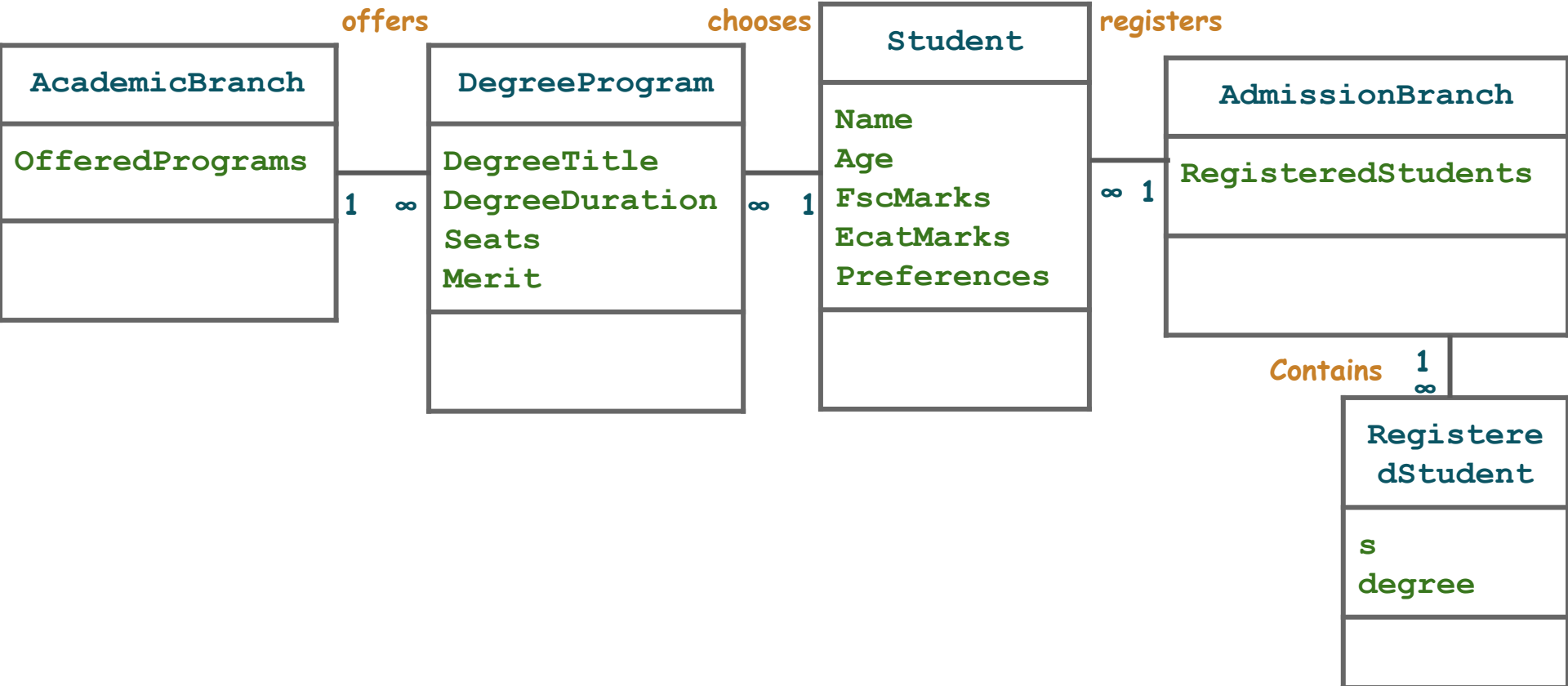
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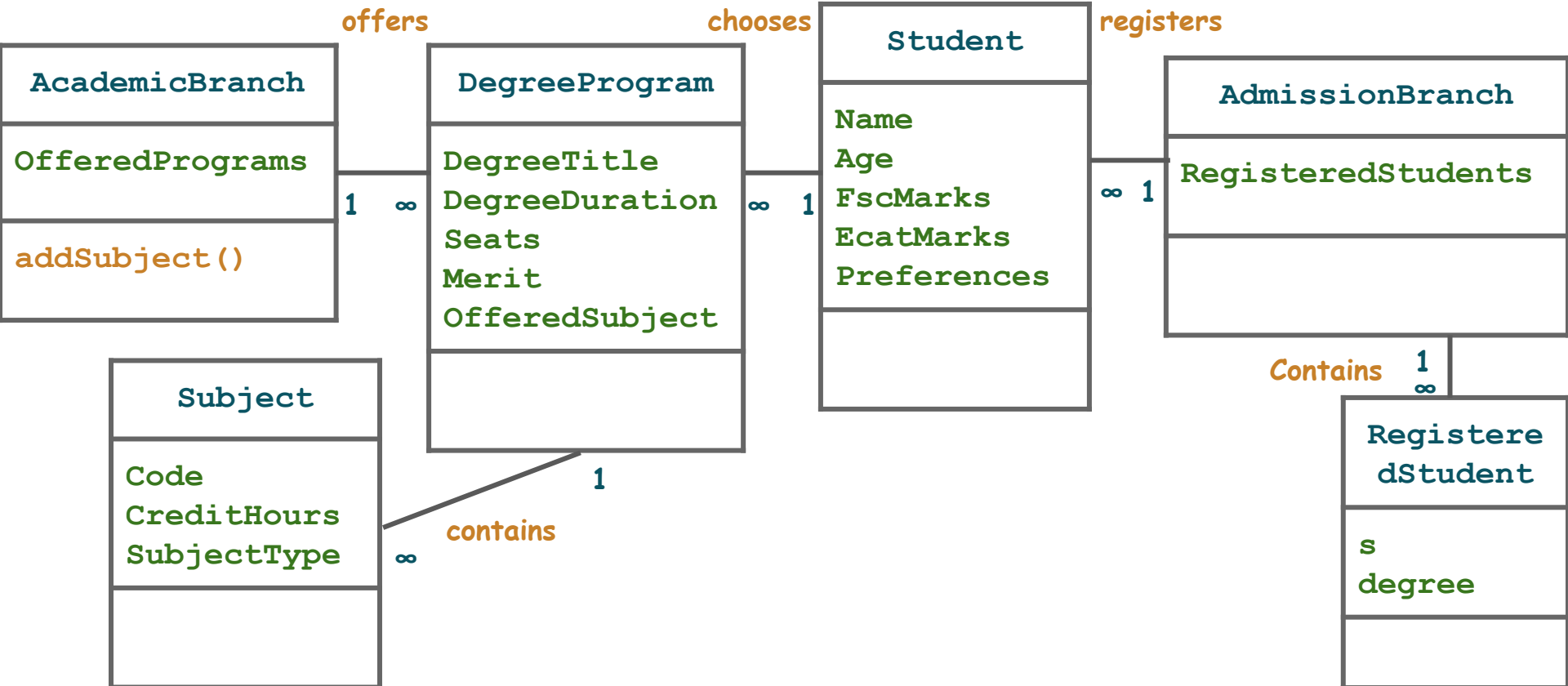
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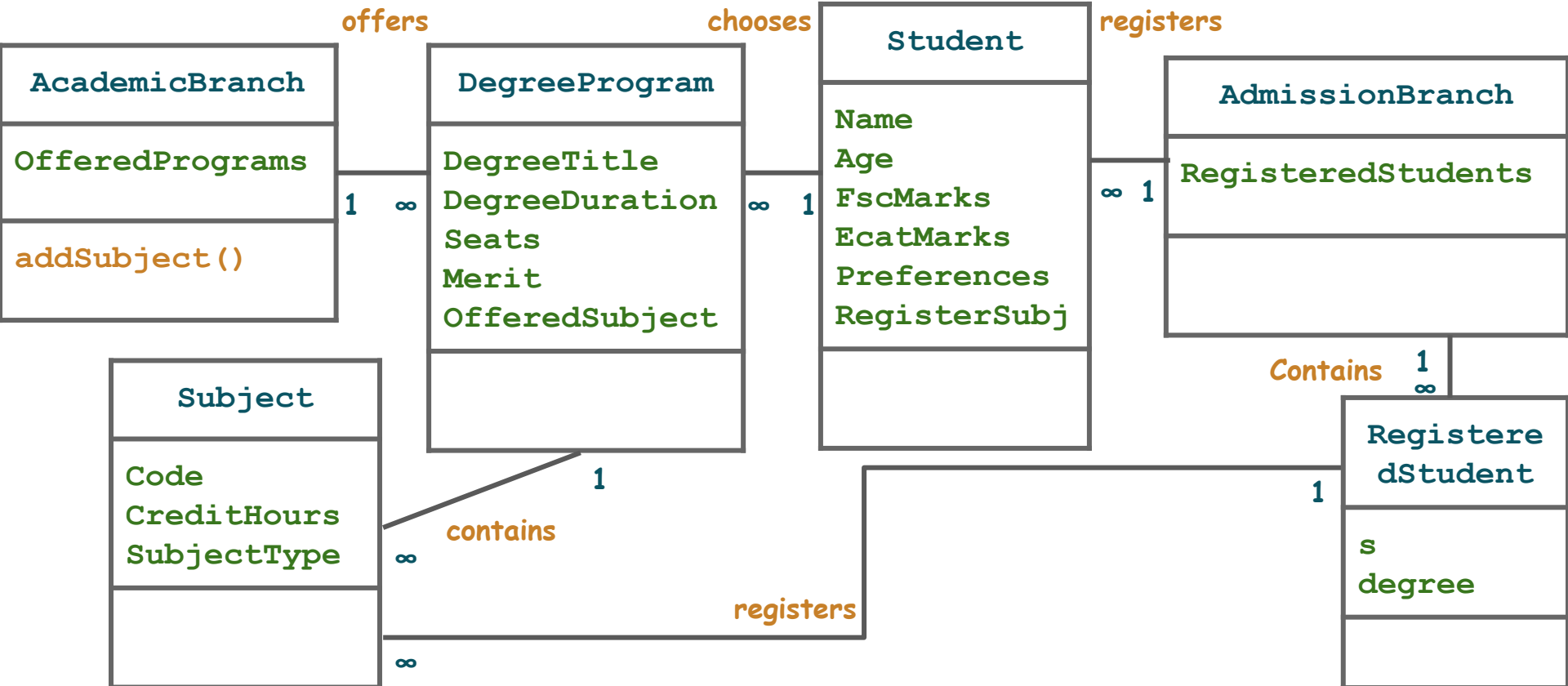
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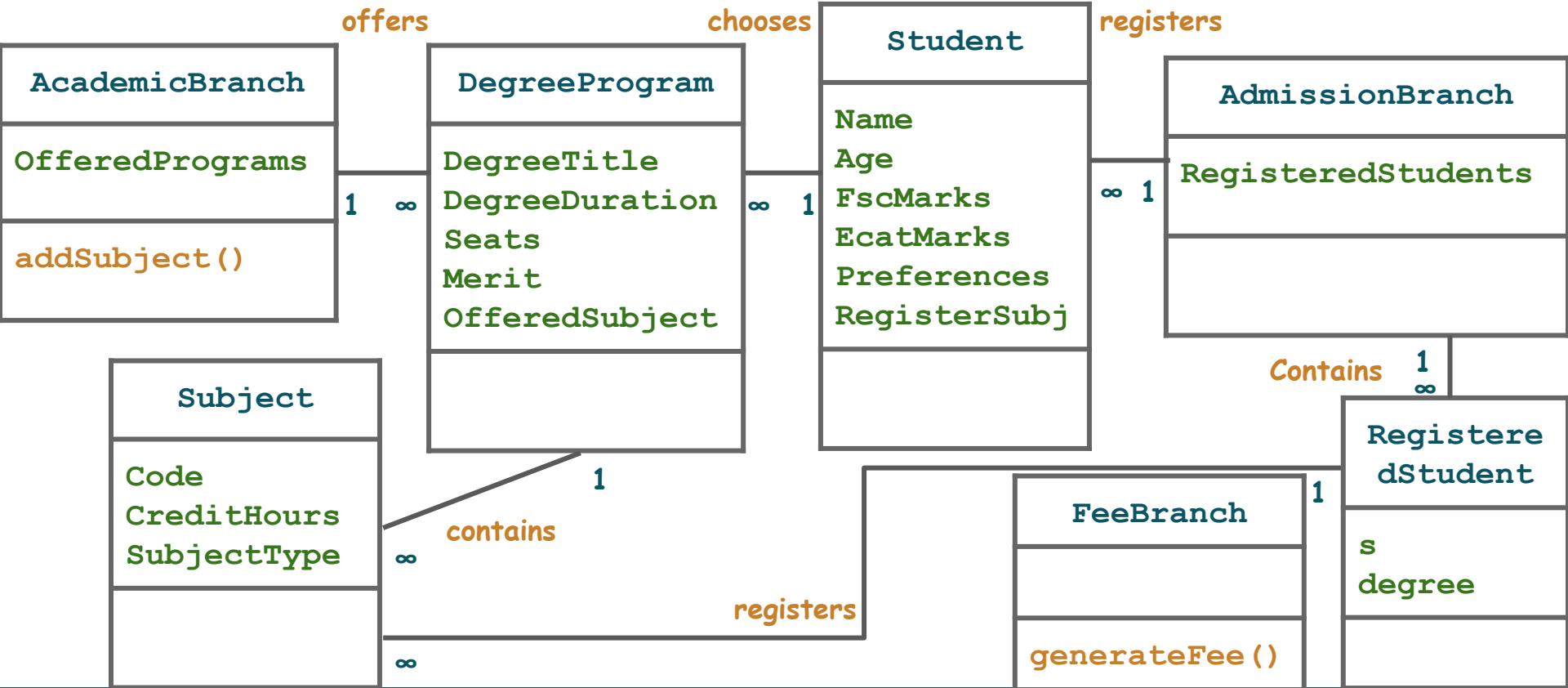
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# Basic Domain Model

We have made a basic **domain Model** from the given Case Study.

When we will convert this domain model into code, many **more behaviours** of the class (functions) will be defined. So, we will **keep on updating the domain model** with the appropriate methods of the class.

# Conclusion

- **OOP Paradigm** recommends to create multiple classes for each real world concept with its own **attributes** and **behaviours** those operate on these attributes.
- The information of number of instances appear in a relation is called the **Multiplicity of the Relation**
- The graphical way to represent classes, attributes, operations, relation (collaboration) and Multiplicity between classes is called **Class Diagram** or **Domain Model**.



# Learning Objective

Identify multiple classes and Association among these classes and draw the Domain Model.



# Self Assessment

1. Implement this using C# code with multiple Classes.

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