2. Navigation Model

Contents:

2.1 Navigational Space Model

2.1.1 Defining Navigational Classes:

Let's define all of the classes first and then separate navigational classes from them:

- ✓ University
- ✓ Quiz Management System
- ✓ Admission System (can be application of a job or admission as a student)
- ✓ Student
- ✓ Faculty Member
- ✓ User(can be a student or a faculty member)

Now we need to extract navigational classes, which are classes whose instances are visited by the user during navigation.

A simple user visits:

- University portal
- Admission System

A user becomes a Student by taking admission in university by navigating through Admission System, now a student can navigate through:

- Quiz Management System

A user becomes a Faculty member by applying for a job as a teacher in university by navigating through Admission System, now a faculty member can navigate through:

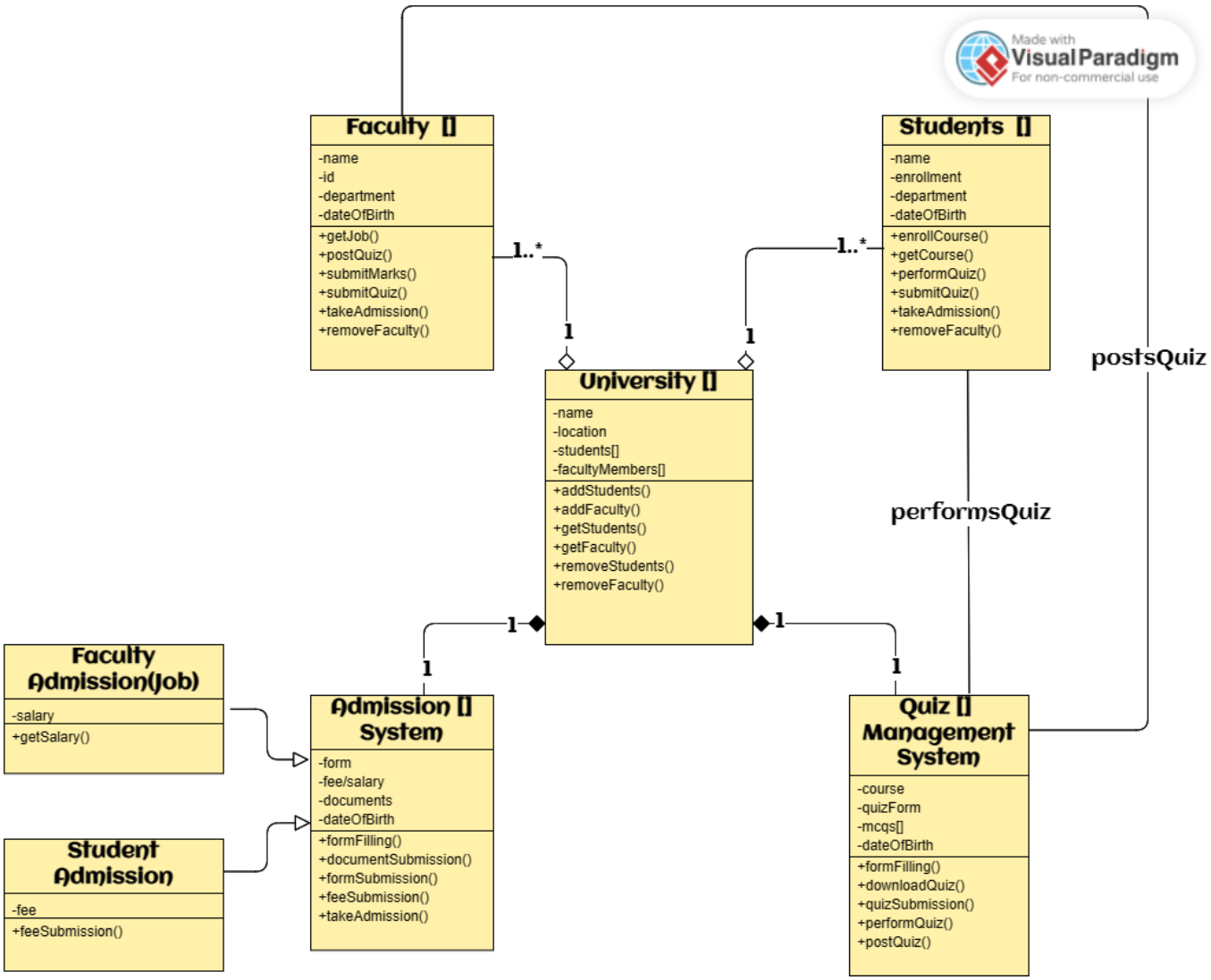
- Quiz Management System

Navigational Classes:

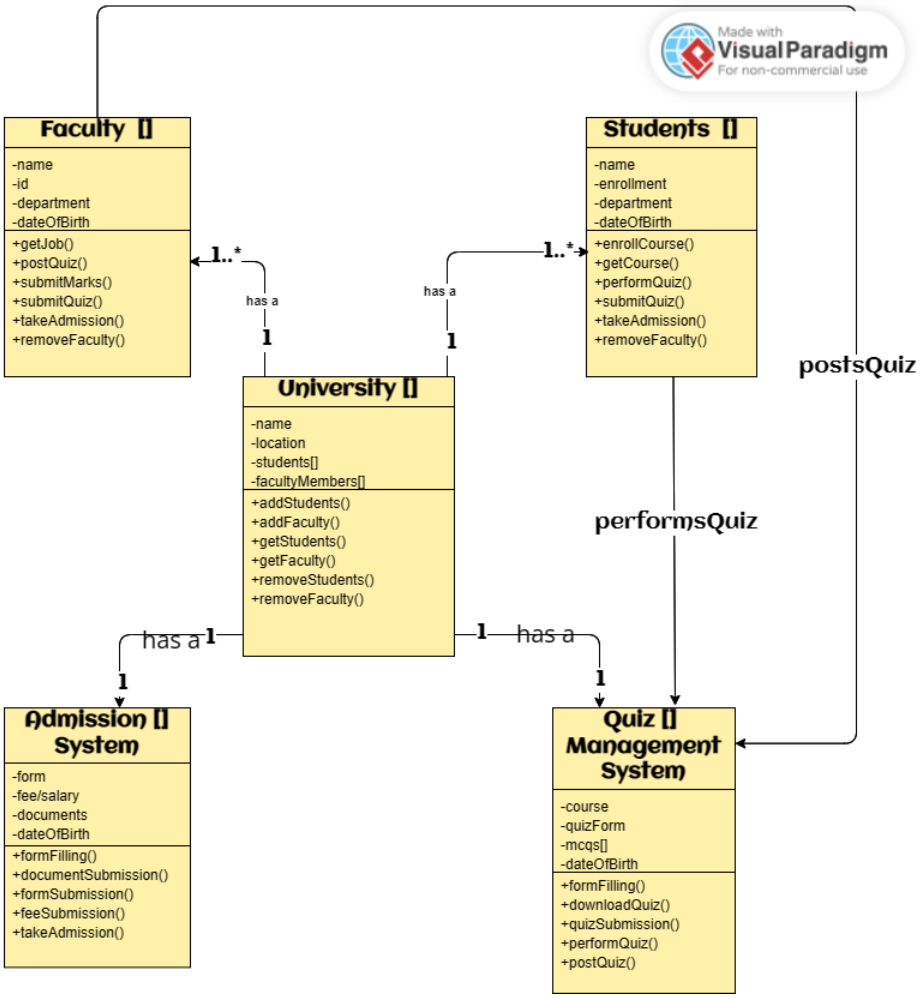
So, the navigational classes are as follows derived from above discussion:

- University
- Admission System
- Quiz Management System
- Student
- FacultyMember

Class Diagram:

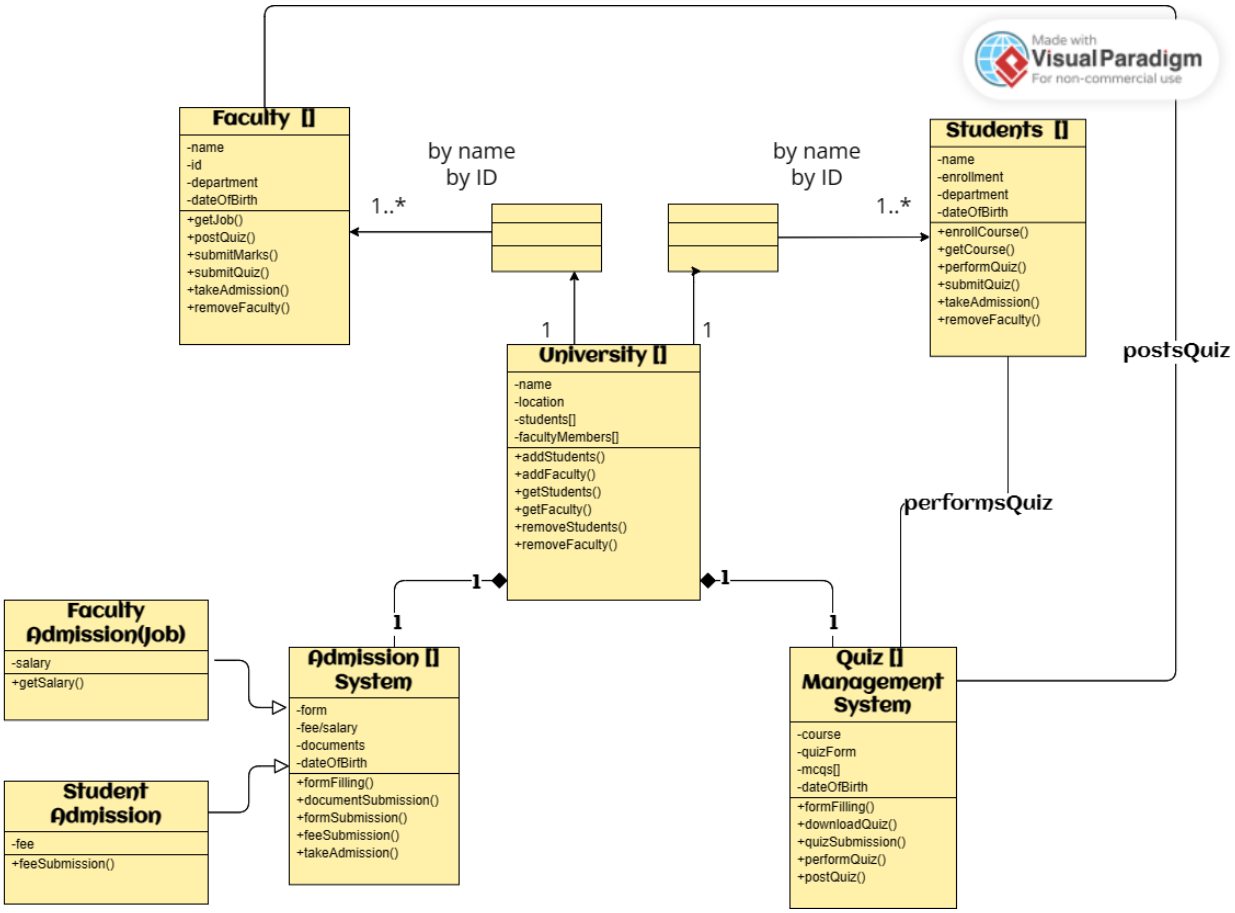


2.1.2 Defining Navigation:

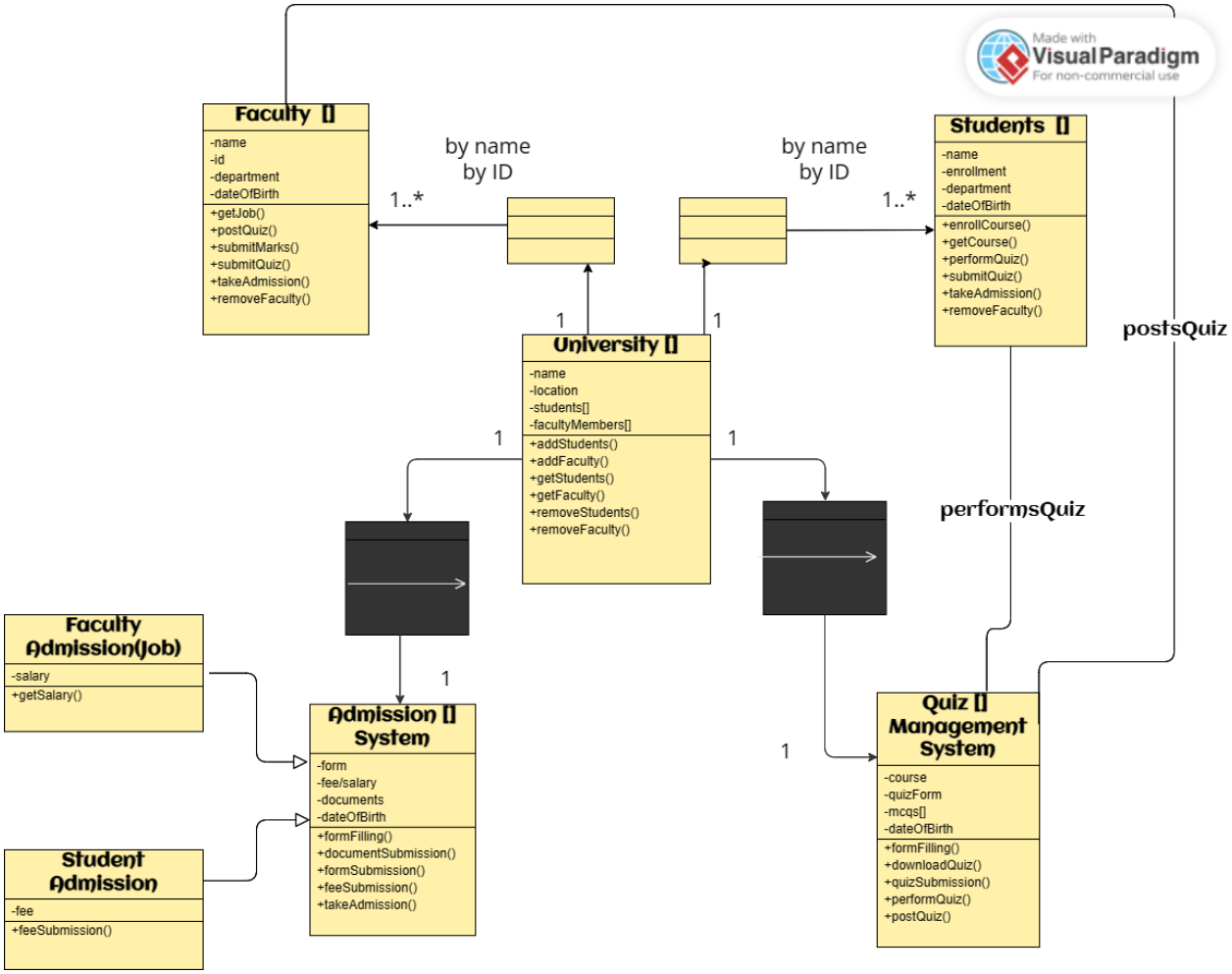


2.2 Navigational structural model

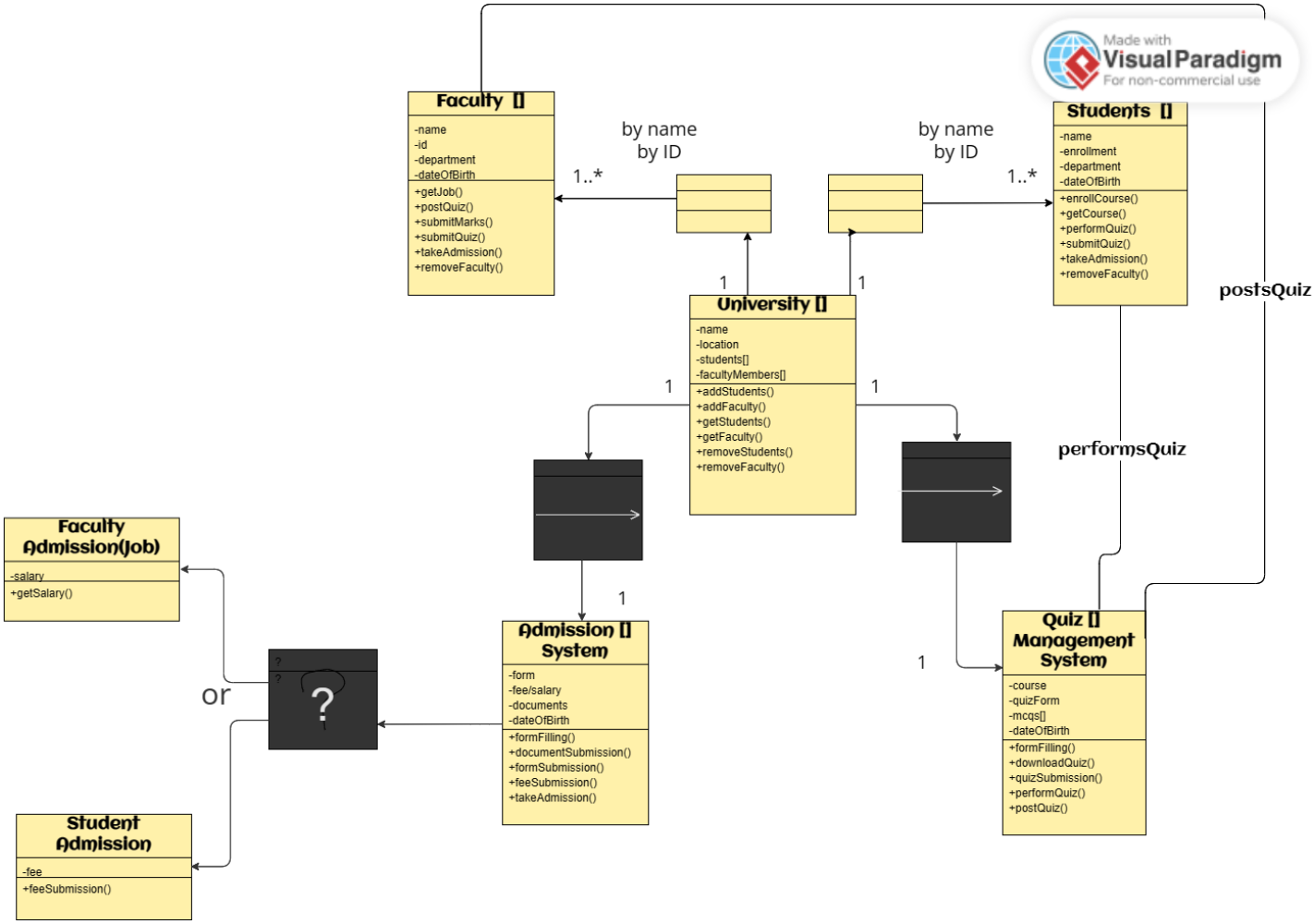
2.2.1 Indexes



2.2.2 Guided Tours



2.2.3 Queries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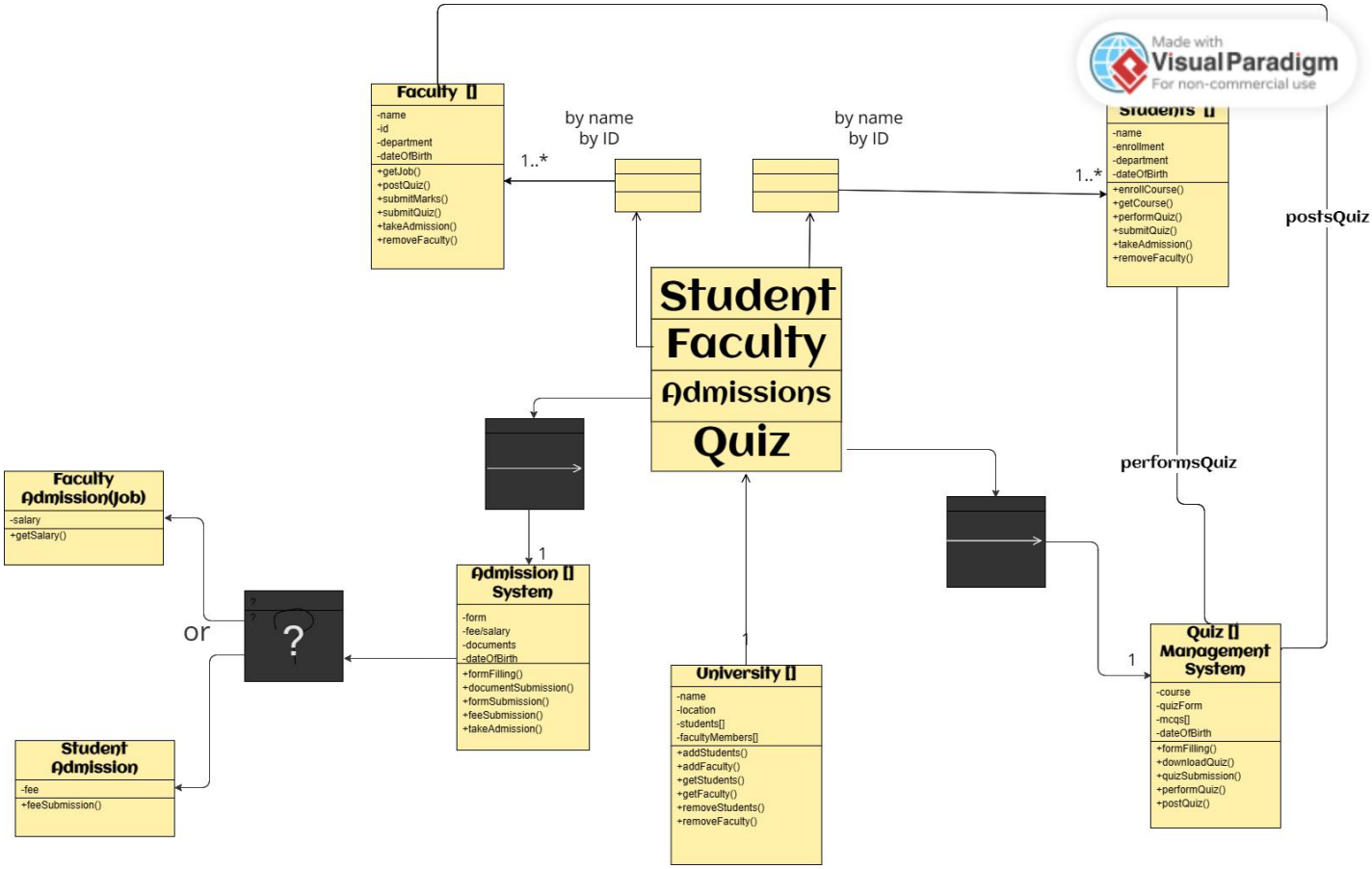
Faculty []
-name
-id
-department
-dateOfBirth
+getJob()
+postQuiz()
+submitMarks()
+submitQuiz()
+takeAdmission()
+removeFaculty()
by name
by ID
1..*
by name
by ID
1..*
Students []
-name
-enrollment
-department
-dateOfBirth
+enrollCourse()
+getCourse()
+performQuiz()
+submitQuiz()
+takeAdmission()
+removeFaculty()
postsQuiz
1
1
University []
-name
-location
-students[]
-facultyMembers[]
+addStudents()
+addFaculty()
+getStudents()
+getFaculty()
+removeStudents()
+removeFaculty()
1
1
performsQuiz
Faculty Admission(Job)
-salary
+getSalary()
or
?
1
Admission [] System
-form
-fee/salary
-documents
-dateOfBirth
+formFilling()
+documentSubmission()
+formSubmission()
+feeSubmission()
+takeAdmission()
1
Quiz [] Management System
-course
-quizForm
-mcqs[]
-dateOfBirth
+formFilling()
+downloadQuiz()
+quizSubmission()
+performQuiz()
+postQuiz()
Student Admission
-fee
+feeSubmission()

2.2.4 Menus


Made with VisualParadigm For non-commercial use
Faculty []
-name
-id
-department
-dateOfBirth
+getJob()
+postQuiz()
+submitMarks()
+submitQuiz()
+takeAdmission()
+removeFaculty()
by name
by ID
by name
by ID
1..*
1..*
Students []
-name
-enrollment
-department
-dateOfBirth
+enrollCourse()
+getCourse()
+performQuiz()
+submitQuiz()
+takeAdmission()
+removeFaculty()
postsQuiz
Student
Faculty
Admissions
Quiz
performsQuiz
Faculty Admission(Job)
-salary
+getSalary()
or
?
Admission [] System
-form
-fee/salary
-documents
-dateOfBirth
+formFilling()
+documentSubmission()
+formSubmission()
+feeSubmission()
+takeAdmission()
1
1
Student Admission
-fee
+feeSubmission()
University []
-name
-location
-students[]
-facultyMembers[]
+addStudents()
+addFaculty()
+getStudents()
+getFaculty()
+removeStudents()
+removeFaculty()
1
Quiz [] Management System
-course
-quizForm
-mcqs[]
-dateOfBirth
+formFilling()
+downloadQuiz()
+quizSubmission()
+performQuiz()
+postQuiz()