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I. Introduction:

1. Product:
- iPhone Application

2. Developer Tools:
- IDE: Xcode 8
- Language: Swift 3
- iOS: 10
- Database:
  - Server: https://firebase.google.com/
  - JSON format
  - Database file: database.json (attachment)
- Version Control
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  - Server: Github- https://github.com/
  - Document: git_document.csv (attachment)
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3. Source code:
a) https://github.com/mpham07/Student-Information-Management-iOS
b) Attachment

II. How many members are you in your team?

There are **3** members:

- Minh Pham
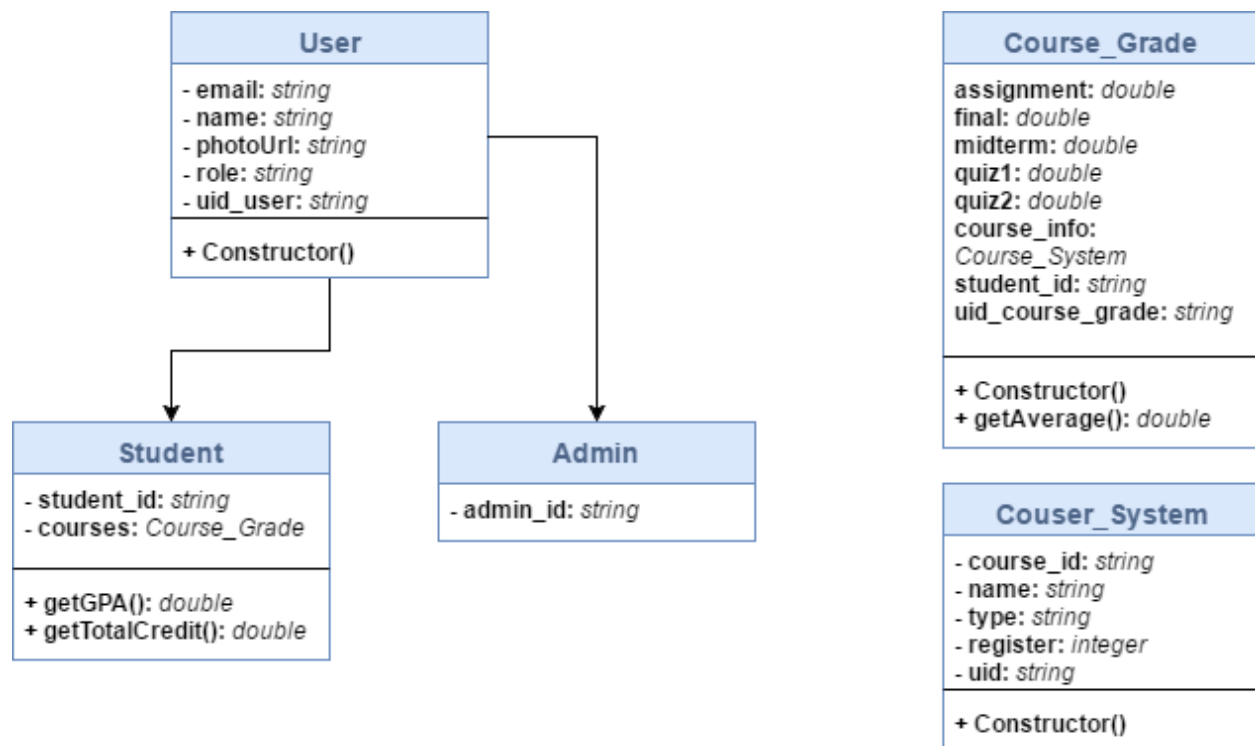- Nhan Nguyen
- Anthony Nguyen

III. What type of team model is used in the project (chapter 4)?
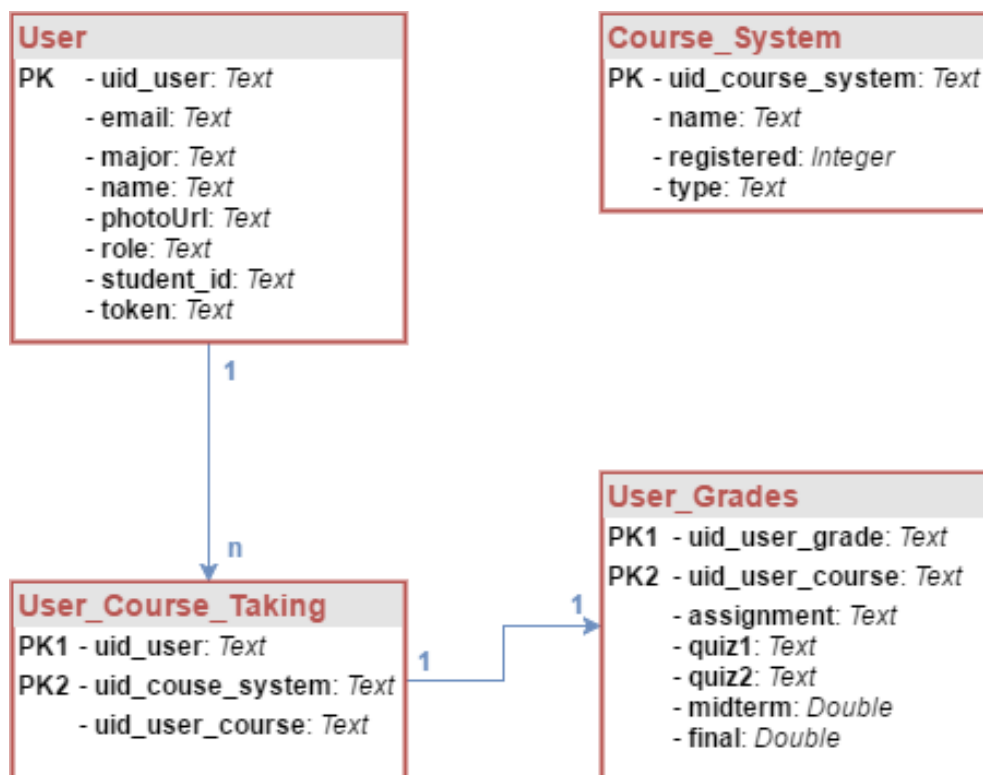
It's is **Classical Chief Programmer Team**.

- *Chief programmer:* Anthony Nguyen
- *Programming Secretary:* Nhan Nguyen
- *Programmer:* Minh Pham

IV. UML diagrams:

1. Class diagram:

User

- email: *string*
- name: *string*
- photoUrl: *string*
- role: *string*
- uid_user: *string*

+ Constructor()

Student

- student_id: *string*
- courses: *Course_Grade*

+ getGPA(): *double*
+ getTotalCredit(): *double*

Admin

- admin_id: *string*

Course_Grade

assignment: *double*
final: *double*
midterm: *double*
quiz1: *double*
quiz2: *double*
course_info:
Course_System
student_id: *string*
uid_course_grade: *string*

+ Constructor()
+ getAverage(): *double*

Couser_System

- course_id: *string*
- name: *string*
- type: *string*
- register: *integer*
- uid: *string*

+ Constructor()

2. Database diagram:

User

PK   - uid_user: *Text*

     - email: *Text*

     - major: *Text*
     - name: *Text*
     - photoUrl: *Text*
     - role: *Text*
     - student_id: *Text*
     - token: *Text*

Course_System

PK - uid_course_system: *Text*

    - name: *Text*

    - registered: *Integer*
    - type: *Text*

User_Course_Taking

PK1 - uid_user: *Text*

PK2 - uid_couse_system: *Text*

    - uid_user_course: *Text*

User_Grades

PK1 - uid_user_grade: *Text*

PK2 - uid_user_course: *Text*

    - assignment: *Text*
    - quiz1: *Text*
    - quiz2: *Text*
    - midterm: *Double*
    - final: *Double*
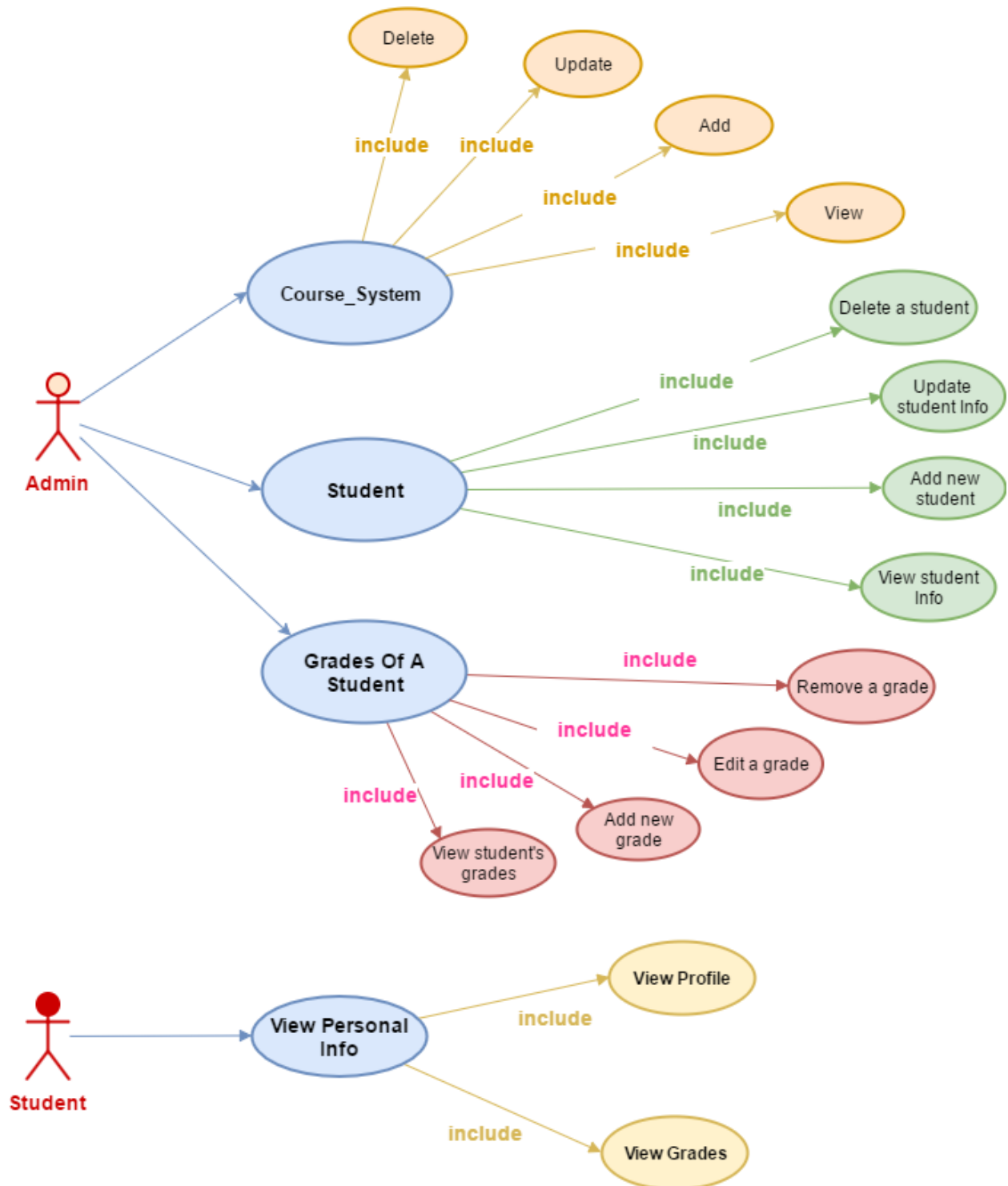
3. Use Case diagram:

4. User Interface flow diagram:

V. Unit Testing: