

The background is a solid blue color. It features several faint, light-blue circular patterns. In the top right, there is a large circular scale with numerical markings from 80 to 210 and a dashed line with an arrow indicating a clockwise direction. In the bottom right, there are concentric circles with dashed lines and arrows. In the bottom left, there is a partial view of a circular pattern with a dashed line and an arrow. The main title 'MEDICOLLAB' is centered in the upper half of the image.

MEDICOLLAB

BY ARINDHAM ANEJA, YIRAN SHENG, PEIYU JIANG

PROJECT OVERVIEW

The purpose of Medicollab is to create a platform where:

- Medical Students can collaborate with professors to research a topic on related subjects and gain work experience.
- Students can search for professors based on their expertise in the subject and send them a request with a brief description of their incentive to work with the professor.
- Professors can assign different tasks to students to help develop their knowledge and grade students for their completed assignments.

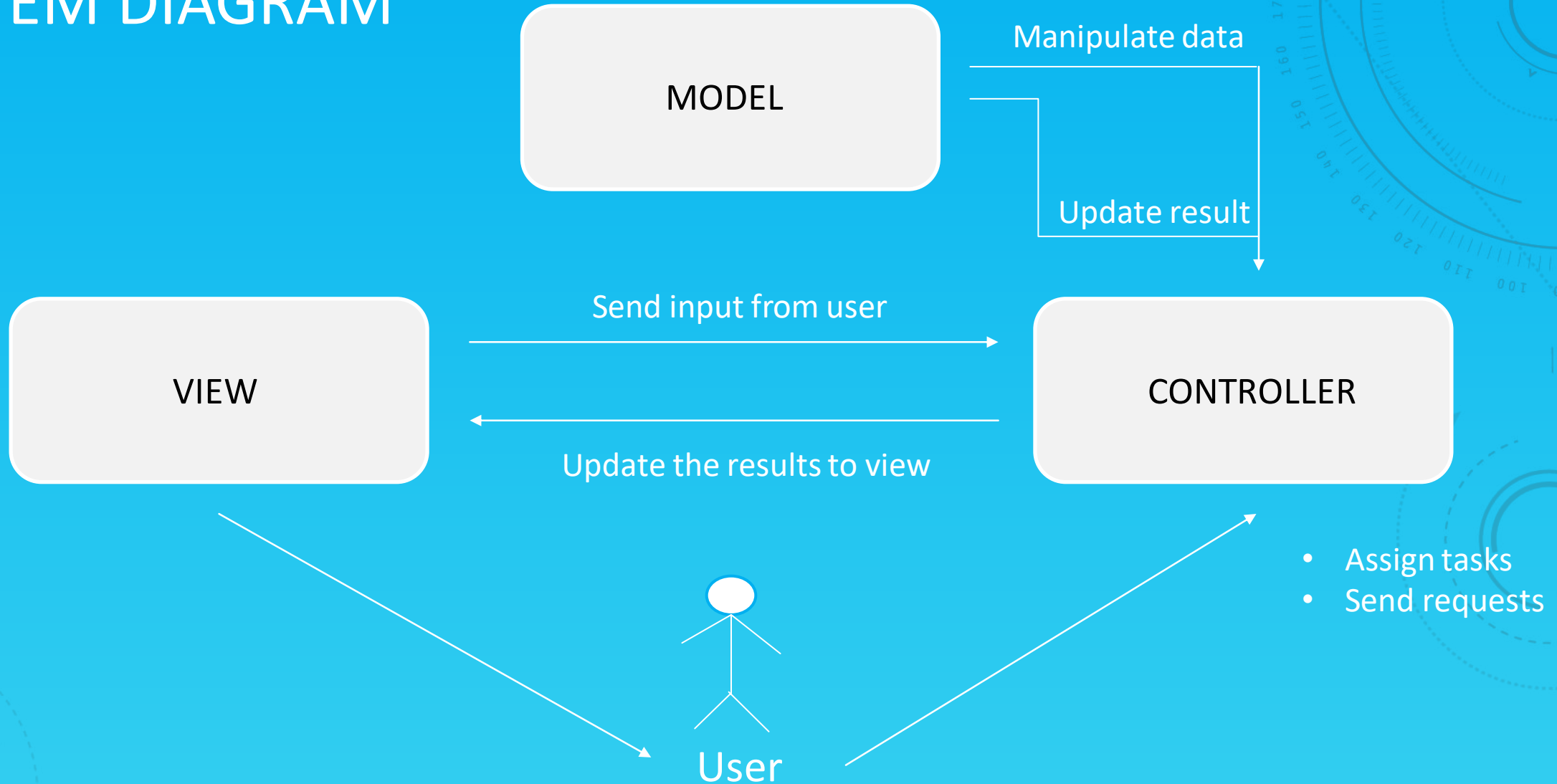
SYSTEM OVERVIEW

This app will be developed using the **Model-View-Controller** architecture.

- The **Model** contains the pure application data and interacts with the controller by providing it the information and getting updated in return
- The **Controller** exists between view and model. It listens to events triggered by the user and executes the appropriate reaction by calling a method on the model and reflecting it in the view.
- The **View** presents the data to the user. It is responsible for the visual representation of the app.

ARCHITECTURAL STYLE & SYSTEM DIAGRAM

- Professor data
- Student data
- Assignments list



ACTOR IDENTIFICATION

The actors include:



Student

Uses the app to search for professors and work with them to gain experience and knowledge.



Professor

Uses the app to mentor students, acquaint them with concepts of a particular medical subject and grade them on the basis of knowledge they display.

DESIGN PATTERN

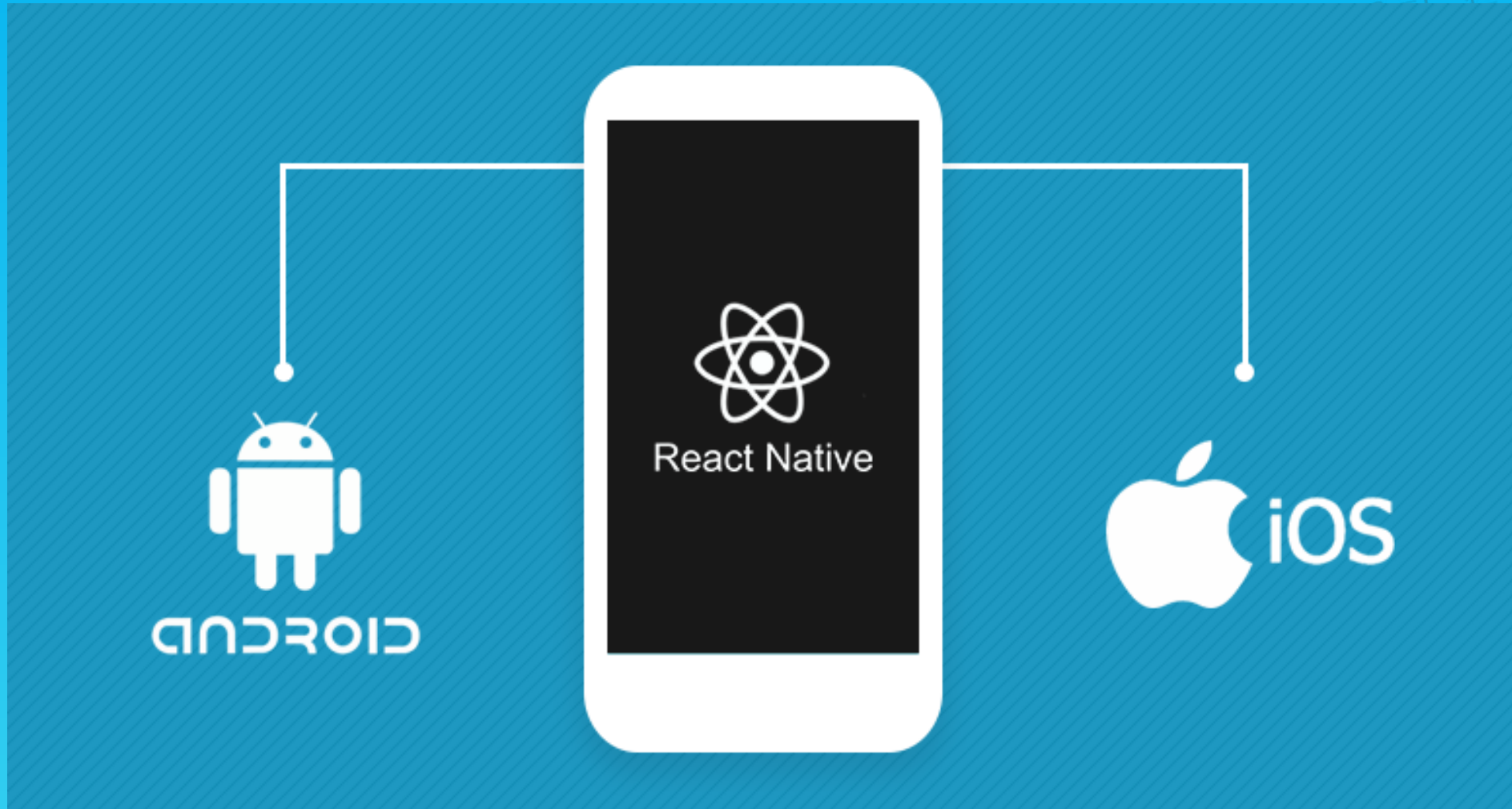
Singleton Method

- It restricts a class to instantiate its multiple objects and is defined in such a way that only one instance of the class is created in the complete execution of a program. This pattern will be used in student and professor class to create only one instance of student and professor at one time.

Factory Method

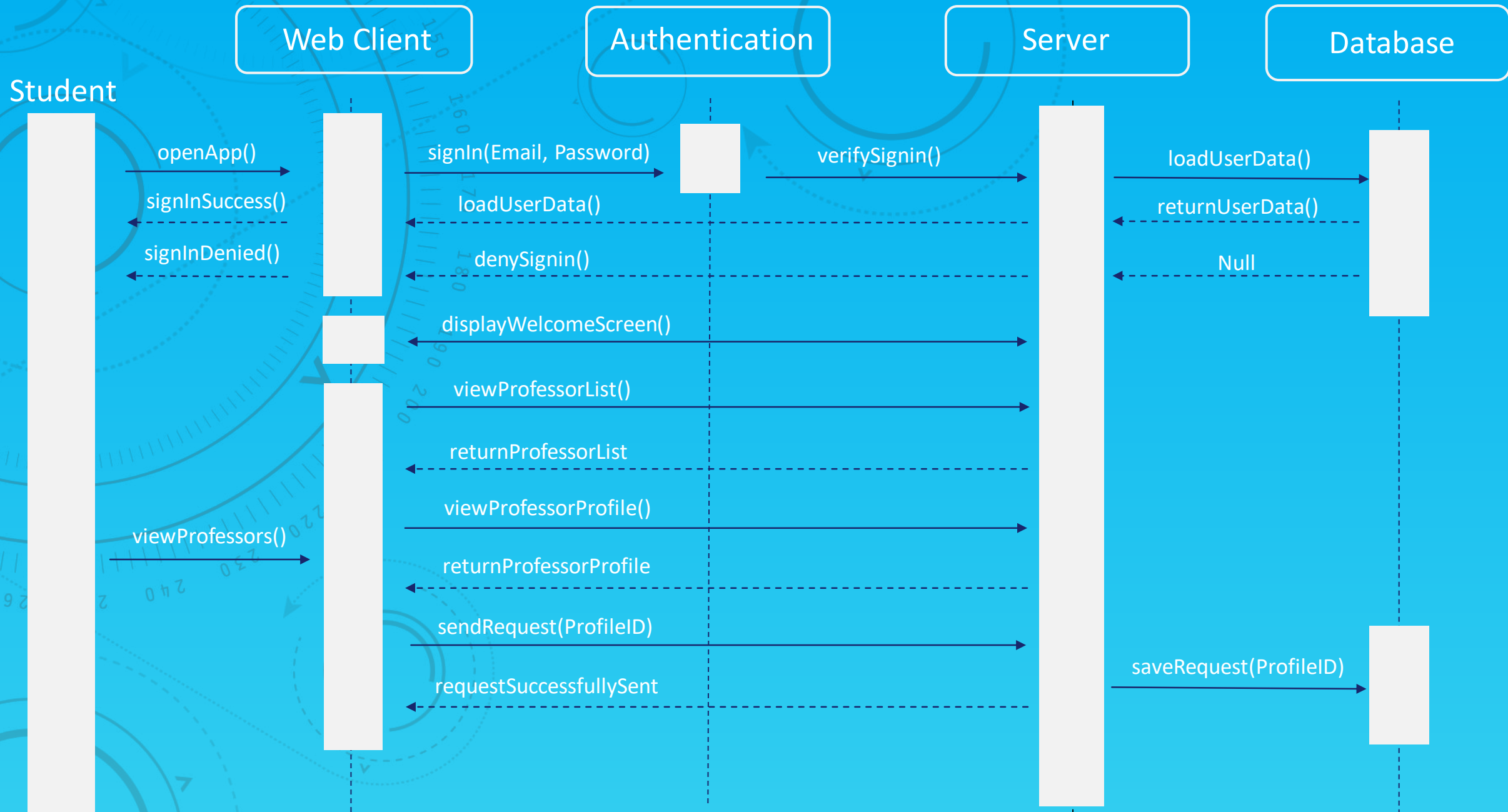
- Provides approach to code for interface rather than implementation and abstraction between implementation and client classes through inheritance. It removes the instantiation of actual implementation classes from client code and keeps the code more robust, less coupled, and easy to extend. Because the student and professor classes share some common properties, we will create the abstract objects of student and professor classes in person class by using this method

FRAMEWORK



SEQUENCE DIAGRAM

The background is a solid blue color. It features several faint, light-blue circular patterns. In the top right, there is a large circular scale with numbers from 80 to 210 in increments of 10. Below this scale is a smaller circle with a dashed line and an arrow pointing clockwise. In the bottom left, there is another circular pattern with a dashed line and an arrow pointing clockwise. The text 'SEQUENCE DIAGRAM' is centered in the middle of the image in a white, sans-serif font.



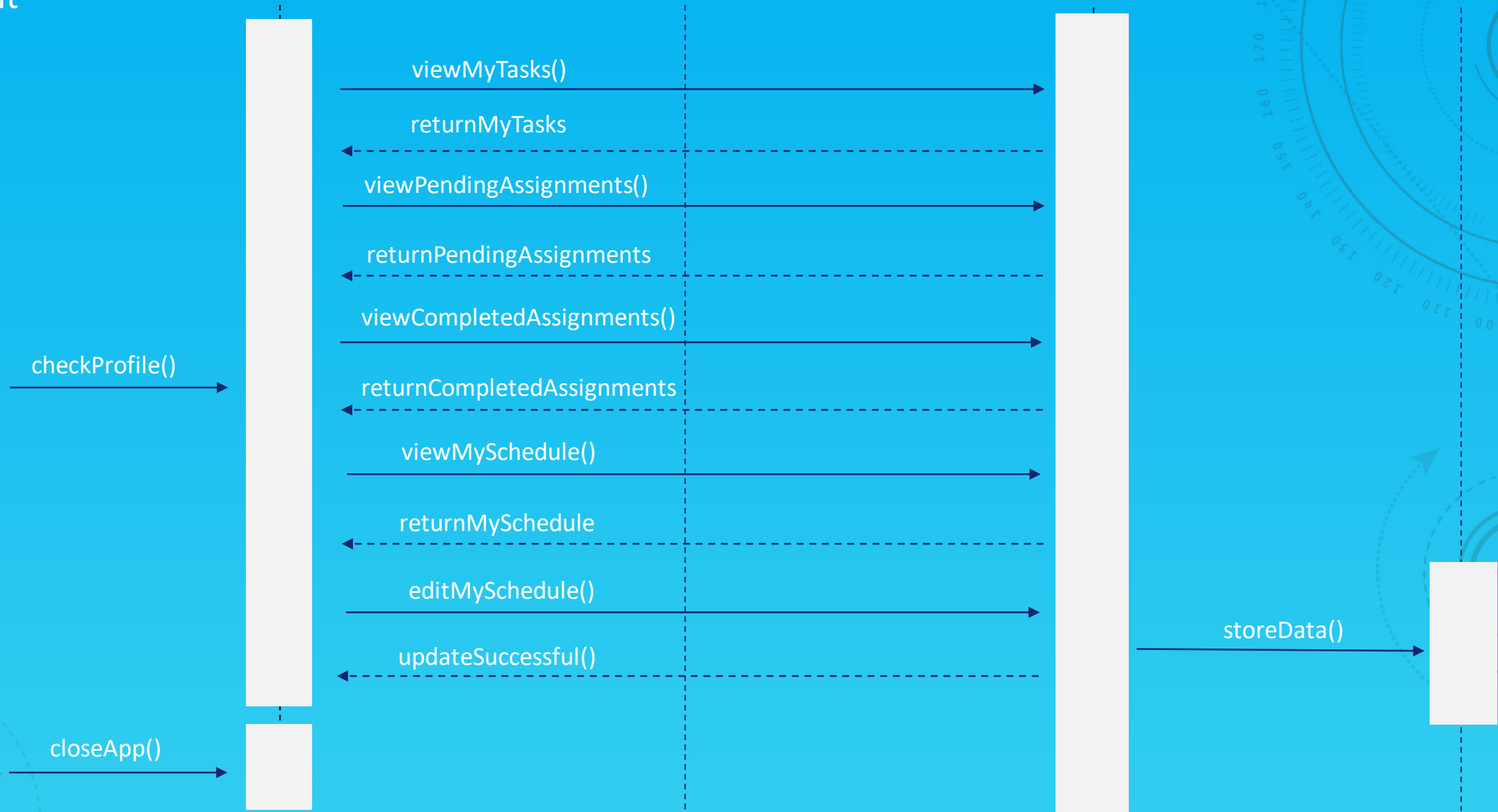
Student

Web Client

Authentication

Server

Database



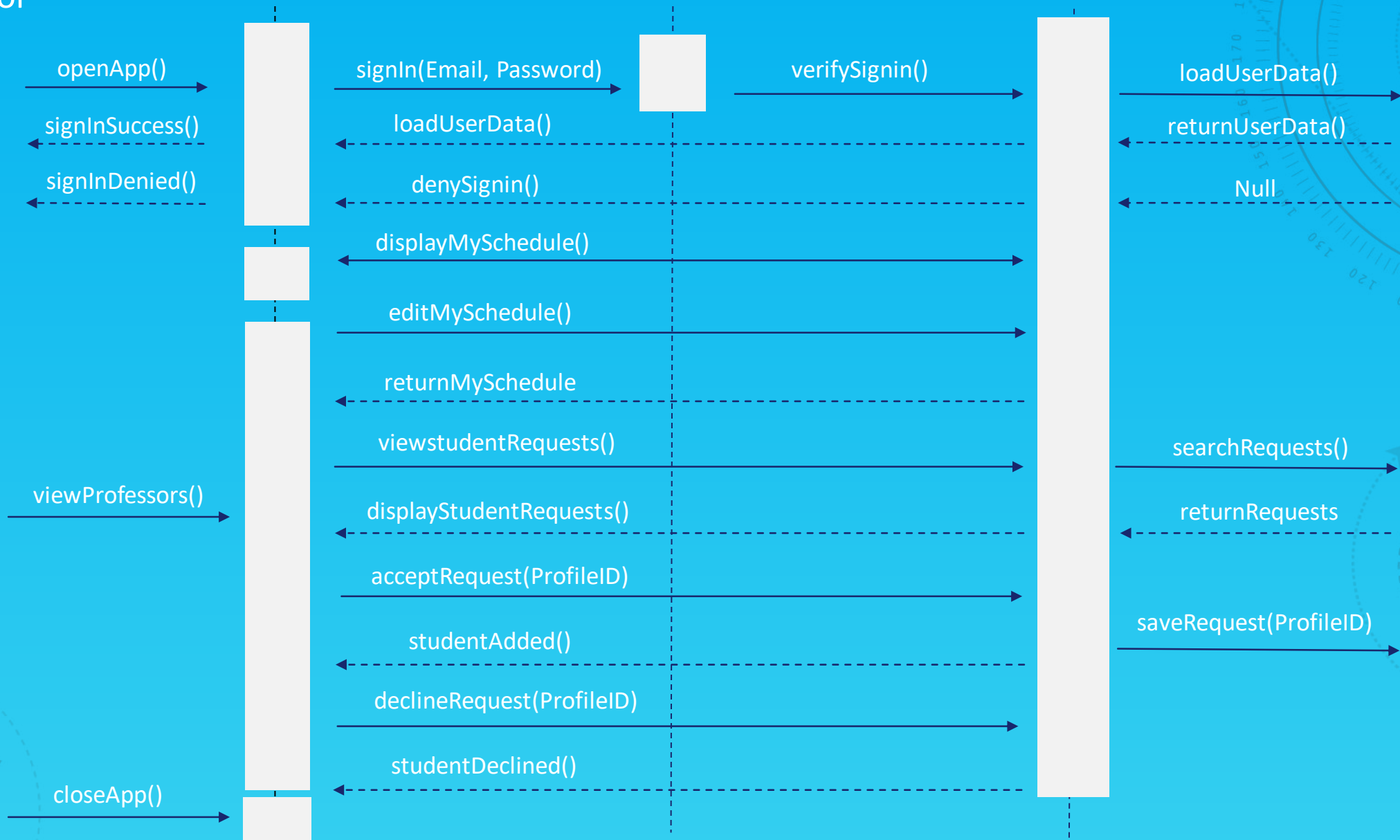
Professor

Web Client

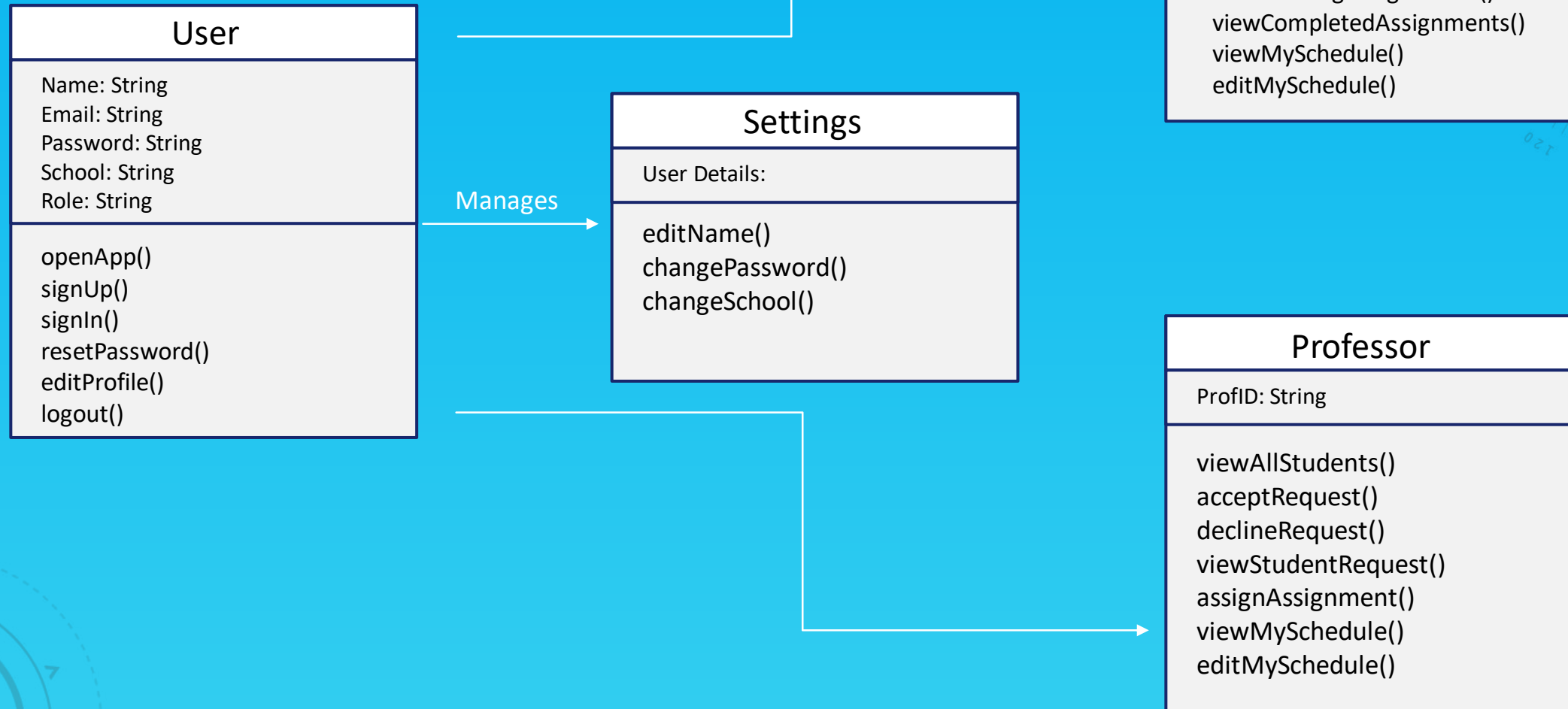
Authentication

Server

Database



CLASS DIAGRAM



MOCK UP

Sign In
Sign Up

Your School

Email Address

Password

☐ Student ☐ Professor

Sign Up

Sign In
Sign Up

Email Address

Password

[Forgot Password?](#)


Sign In

Welcome
Back!


Search for division...

Search for professor...

[See full list](#)



Professor Liam Sacco
Clinical Neurology
+1 305 584 7012
Students Undertaken: 16



Professor Julio Ramirez
Cognitive Disorder Division
+1 305 923 6754
Students Undertaken: 9



Professor Liam Sacco
Clinical Neurology
+1 305 564 7012
Students Undertaken: 16



Professor Julio Ramirez
Cognitive Disorder Division
+1 305 923 6754
Students Undertaken: 9



Professor Sean Bernard
Dermatology Division
+1 305 120 1221
Students Undertaken: 12



Professor Walter Gillis
Gastroenterology
+1 305 666 1414
Students Undertaken: 21



Professor Liam Sacco
Clinical Neurology
+1 305 564 7012



9am-9:50am
11am-12:15pm



1pm-2:15pm



9am-9:50am
11am-12:15pm



No Classes



9am-9:50am
11am-12:15pm

Send Request

Mention the time schedule.



9am-9:50am
11am-12:15pm



1pm-2:15pm



9am-9:50am
11am-12:15pm



No Classes



9am-9:50am
11am-12:15pm

Explain what you expect while
working under this professor.....

Send Request

Congratulations!!

Your request is sent and the
professor will get back to you shortly

Request
Sent!

Next



Evan Matthews
Bachelor of Medicine
University of Miami

My Tasks

- Submit the subject's abnormalities that affect daily functions report.
- Analyze the symptoms of memory loss leading to memory loss.
- Write a 750 word essay on mineral deficiency



Evan Matthews
Bachelor of Medicine
University of Miami

Pending Assignments

- Submit the subject's abnormalities that affect daily functions report.
- Analyze the symptoms of memory loss leading to memory loss.
- List all the symptoms of osteoporosis



Evan Matthews
Bachelor of Medicine
University of Miami

Completed Assignments

- Write a 750 word essay on mineral deficiency
- How did the bone cancer originate in subject 3's body?



Evan Matthews
Bachelor of Medicine
University of Miami

My Schedule



9am-9:50am



No Classes



9am-9:50am



No Classes



11am-12:15pm





Professor Liam Sacco
Clinical Neurology
305 564 7012

Student Requests



Evan Matthews
Bachelor of Medicine
University of Miami



Professor Liam Sacco
Clinical Neurology
305 564 7012

My Schedule



9am-9:50am
11am-12:15pm



1pm-2:15pm



9am-9:50am
11am-12:15pm



No Classes



9am-9:50am
11am-12:15pm

Edit Schedule



Evan Matthews
Bachelor of Medicine
University of Miami

Hello there professor, I would love to learn how you perform the bone marrow transplant and hope to intern under you for 1 month.

Time Schedule:
Monday: 9am-9:50am
Wednesday: 9am-9:50am

Reject

Accept



Professor Liam Sacco
Clinical Neurology
305 564 7012

Students List



Evan Matthews
Bachelor of Medicine
University of Miami



Diana Williams
Bachelor of Medicine
University of Miami



The background is a solid blue color with faint, light blue circular patterns. These patterns include concentric circles, dashed lines, and arrows, suggesting a technical or scientific theme. The text is centered and reads:

THANK YOU FOR LISTENING
ANY QUESTIONS?

<https://github.com/arindham123/CSC431>