

Virtual Class Venture for CSE 400 at 03.11.2020

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Proposed Main Features:

- Our project main target is to create video streaming based on webrtc.
- Screen controlling and Screen sharing while video streaming.
- Audio mute/unmute option.
- Chat between teacher and student while video streaming.
- Record teacher's activity during video streaming and save it on the system.
- Teacher can see the student participate list.
- Basic CRUD functionality (Profile create and maintenance by teacher and student).
- Admin panel for monitoring teacher and student activities and also manage other admin activities.

Proposed Additional Features:

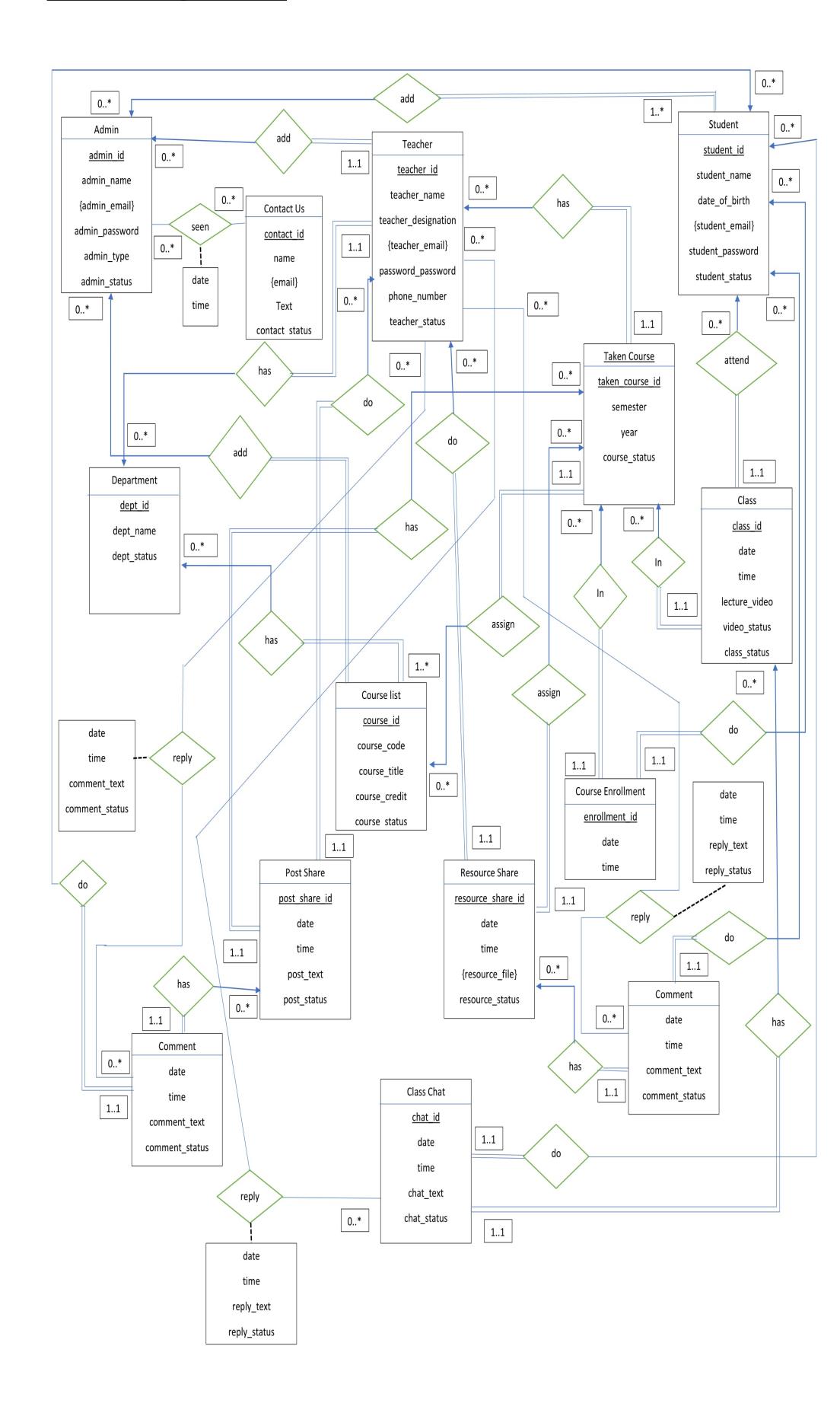
- Basic CRUD functionality include file upload, download, delete etc.
- Comment on post both teacher and student.
- Teacher will be able to take attendance dynamically.
- Teacher will be able to test student in quiz format.
- Create announcement by teacher.
- Teacher will be able to take assignment from student through the system.

Tools that we planned to use:

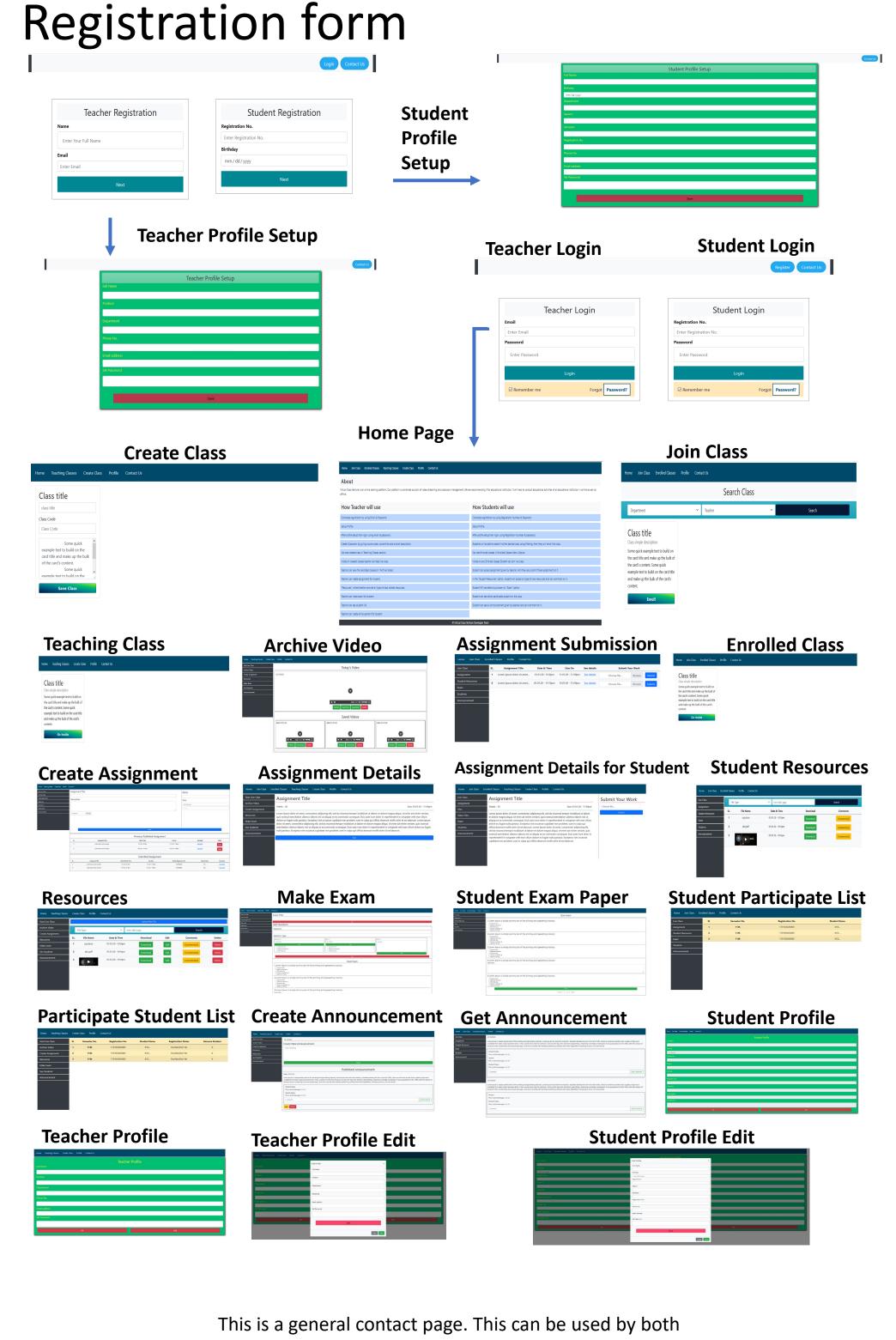
- We use Bootstrap5 (Alpha) version for designing webpages with some custom CSS.
- In future we use MySQL for database.

- For implementing WebRTC and all dynamic features we will use Node.js.
- We have already used JavaScript to design some feature and we will continue it for future development.
- For developing some features we have used jQuery and we will continue it for future development.
- If an API is needed for project development, we will use it in the future.

ER Diagram:



User Interface Design:



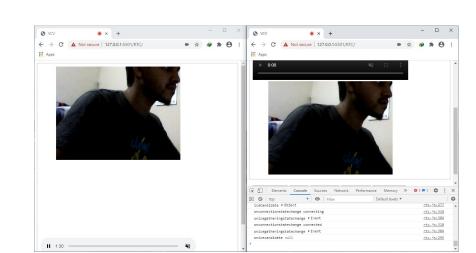
the student and the teacher for any query to the ad Contact Us Your Name * Your Email * Your Message * Send Message

This is the initial stage of live class before class started.

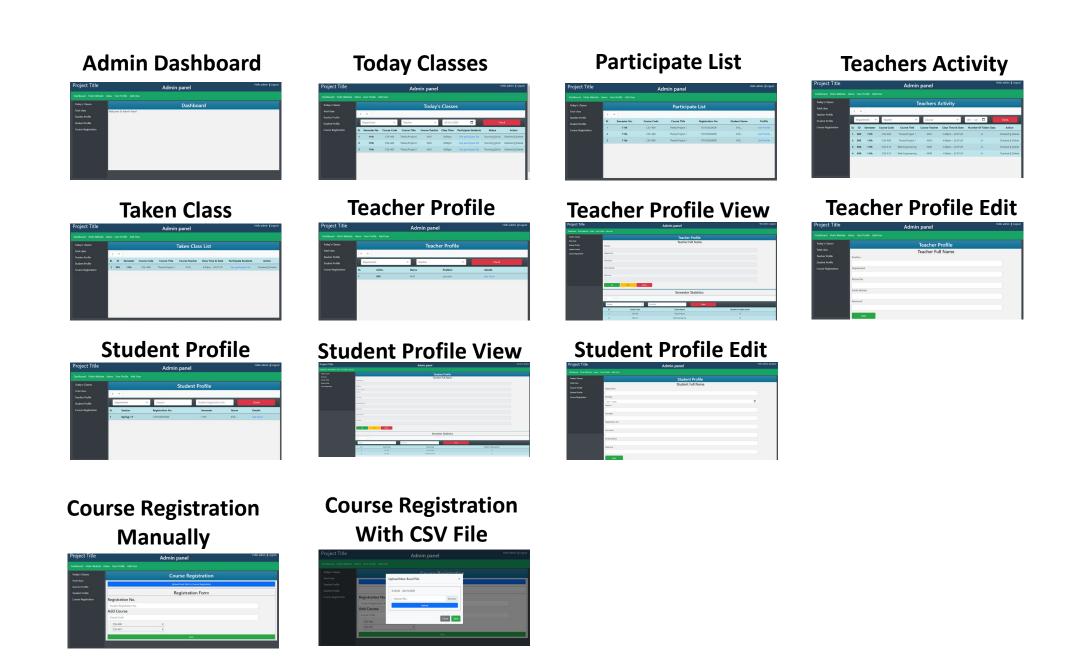
RTC Interface:

Start Connection UnMute Start Camera Screen Share Start Recording

est click on the 'Start Connection' button it will be connected with before connect user have to answer the confirmation message. Here lone one to one connection.



Admin Interface:



Works Done:

- We have completed our frontend.
- We know that RTC is a big concept. Due to time constraints we have only done the work of one to one connection.
- We have completed our project ERD.

Future Work:

- We want to complete WebRTC related work which is included in the main features.
- If we get enough time, then we will complete our additional some features.

Contribution:

- Nadir has done frontend of our project.
- Asif has done a part of WebRTC which is our main feature of project.
- Other project related work like as ER Diagram, report writing, poster design, requirement analysis and gathering, background study have been done by both.
- We both understood every single line of code there is in the project whether it is frontend, RTC and ER Diagram.