SHAH AND ANCHOR KUTCHHI ENGINEERING COLLEGE

Project on

E-slate Collaborative application

BE Project Report

under Mr. J. A. Gokhale (former HOD of Computer Dept. , VESIT)

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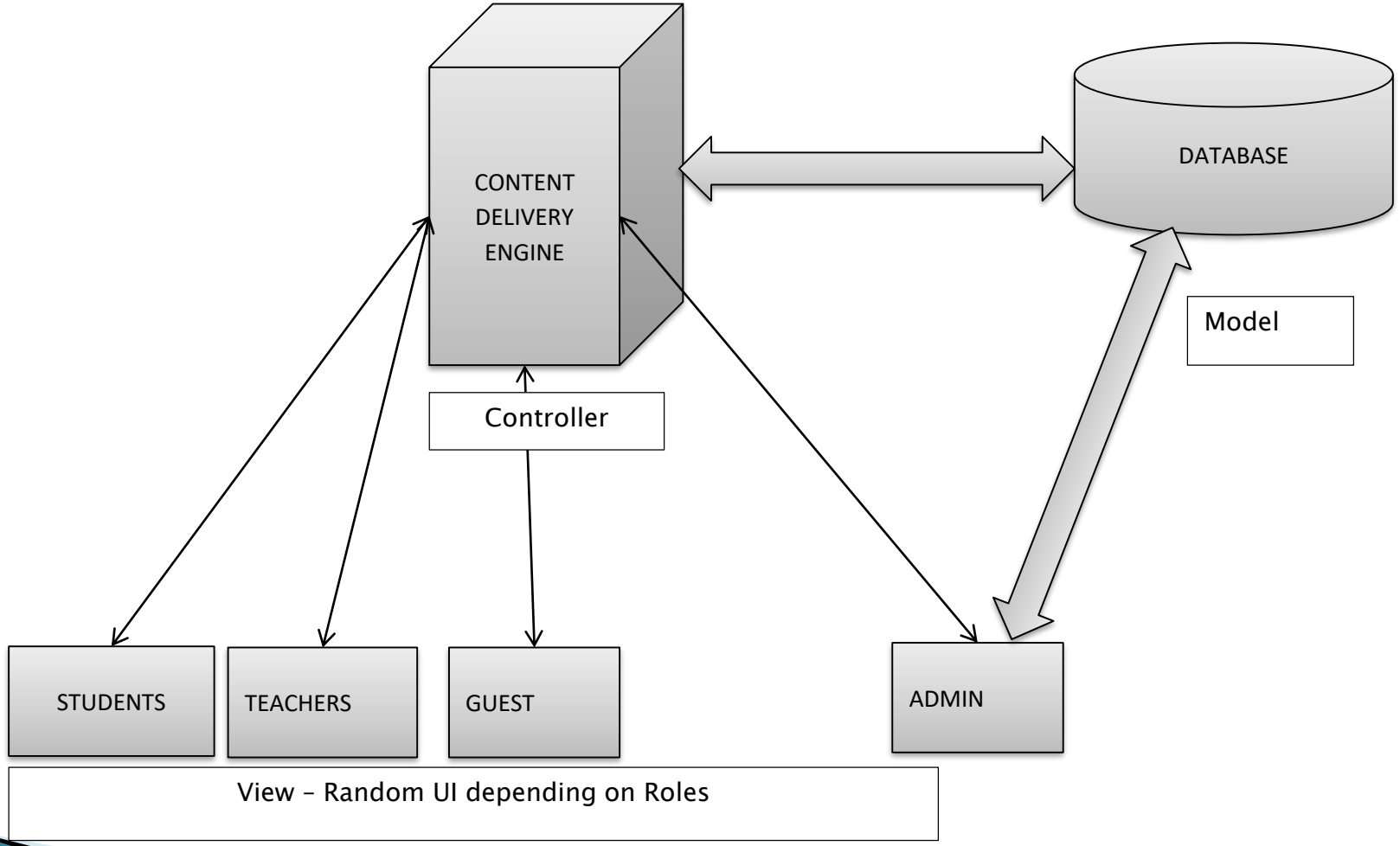
E-slate Collaborative application

- This application is designed for a **classroom environment** and digital learning.
- This application helps in making learning faster, easier.
- Teachers and students use this e-slate instead of books and notes for teaching and studying in the classroom.
- This application helps in integrating teachers with clients in a virtual environment.

Virtual classroom environment

System Block Diagram



Working of the System

- This application is a collaborative tool which is modelled on MVC (Model – View – Controller) architecture.
- It has a Content Delivery Engine, a Backend Database and a User Interface for different clients.

Backend Database- Model

- The backend database will contain all the users data
- It will be maintain authorization according to their roles.
- It will be handled by the administrator and can accessed by some teachers and students.

Content Delivery Engine - Controller

- It forms the Controller of the system.
- All interaction are controlled by the Content Delivery Engine depending on the role of the user (Student, Teacher, Admin, Guest).
- The content is delivered using the content delivery engine, forming the middle layer.

The User Interface - View

- The User Interface will be generated and controlled by the Content delivery engine depending on the role they belong to.
- The UI will be Graphically Rendered and available in Android tablets.

Features of this application

- Automatic Attendance Registry.
- Share Data with other devices.
- Construct, Conduct and Review test.
- Create Student Group.
- Thumbnails of student’s screens.

Details of these Features

- Automatic Attendance Registry

The application with connect to the server via a router, whose IP address will be stored in the same. When the teacher prompts the server to take attendance, it will fetch the IP addresses of the various clients logged in via that router at that time and store the result of the same in a database.

Data Sharing

- Hosts can share the data which is available in their external memory via wireless medium which will be stored in the database as well.
- The application allows us to share pdfs, multimedia files.

Construct, Conduct and Review Test

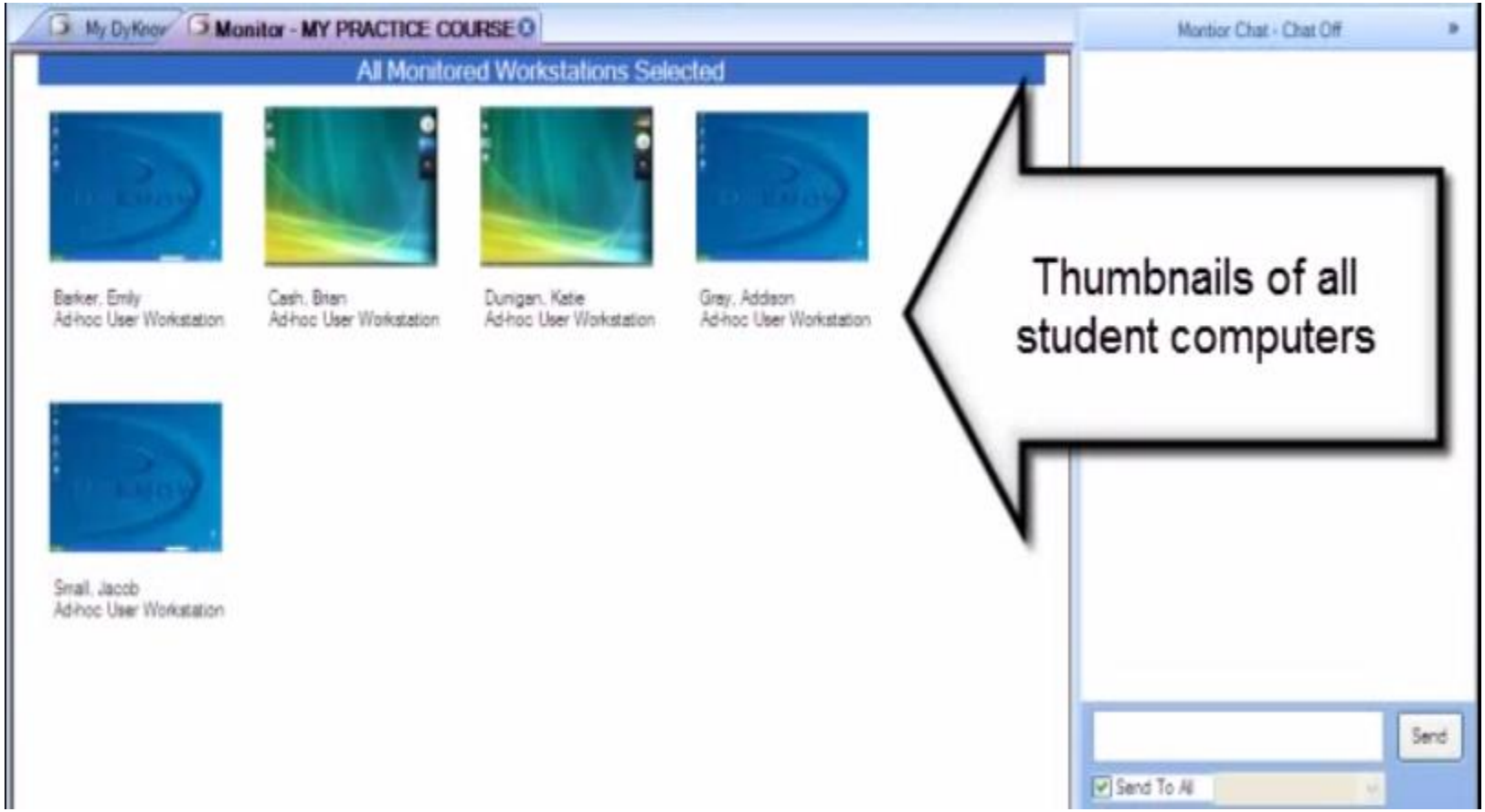
- The teacher can construct a new test using this application.
- The teacher can conduct new test, for which session timings will be allotted.
- The test review mechanism will give the result of the test.

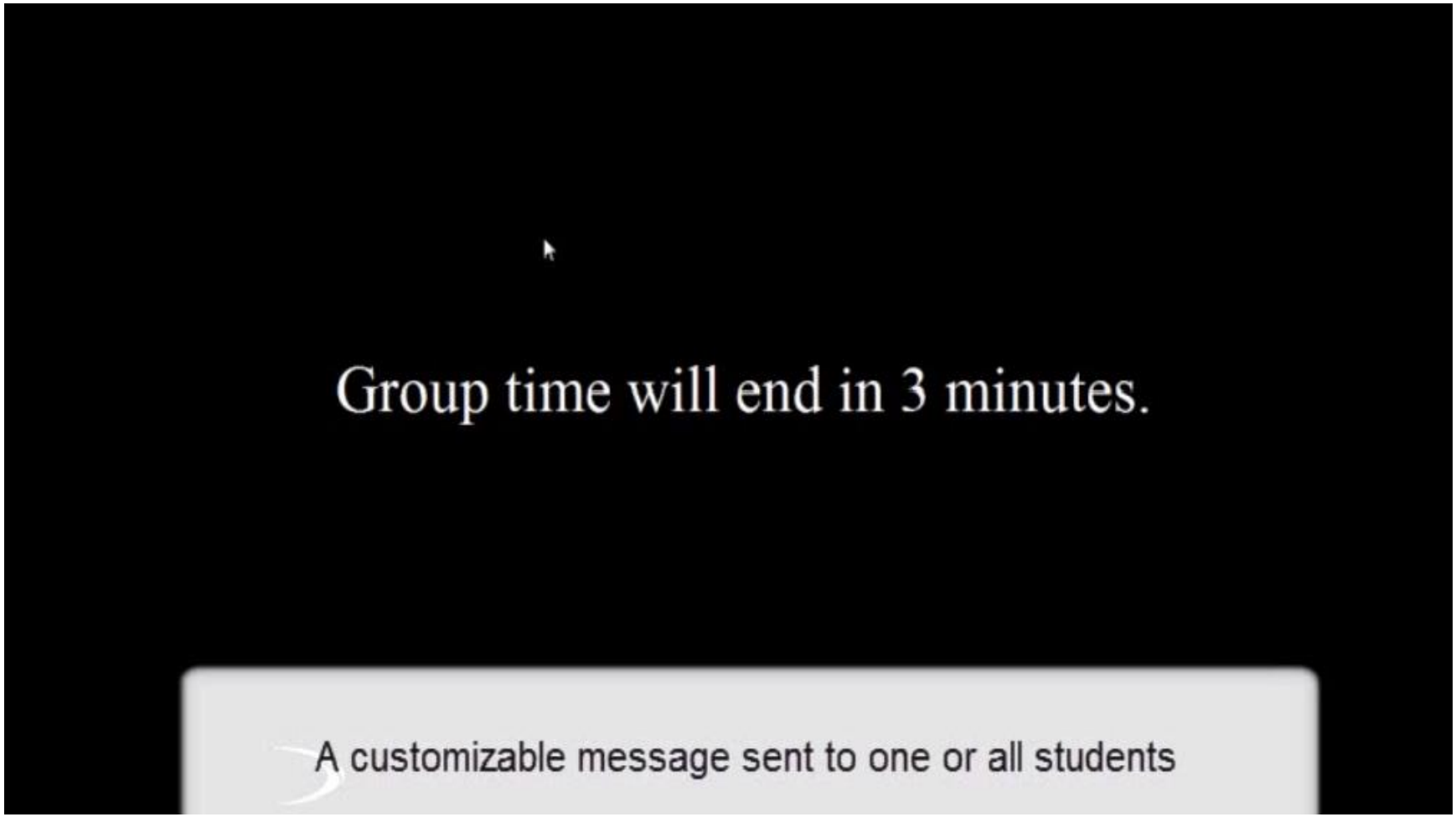
Create Student Group

- The teachers can create various virtual student groups.
- These groups will be assigned a common task.
- This common task can be accomplished by data sharing and view sharing features.

Thumbnails of Students Screen

- The teachers can view the screencasts of the students in thumbnails.
- They can accordingly manage the classroom.
- They can send pop up messages to a group of students or specific student accordingly.


My DyKnow
Monitor - MY PRACTICE COURSE
Monitor Chat - Chat Off
All Monitored Workstations Selected
Barker, Emily
Ad-hoc User Workstation
Cash, Brian
Ad-hoc User Workstation
Dunigan, Katie
Ad-hoc User Workstation
Grey, Addison
Ad-hoc User Workstation
Small, Jacob
Ad-hoc User Workstation
Thumbnails of all student computers
Send
Send To All


Group time will end in 3 minutes.
A customizable message sent to one or all students

Software Development Environment

- Eclipse – Software development tool to build the application.
- Android SDK and AVD(Android Virtual Device) to run and test the application.
- Windows7/Linux operating system.

Thank you