

Qualitative Study Overview



Course: CSE499 (Senior Design Project)

Section: 18

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Project Group-01

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Project Initial Features

AR-Schoolbook, an android app targeted for Bangla medium class-7 students. Initial features include,

1. Each figure and experiment included in the book will be used as a marker. Pointing the camera at these markers will start the AR view/interaction.
2. AR experiences will be of two types,
 - a. Biology figures- A sizable 3D model of the figure will appear on screen and the user can touch different parts from the figure to highlight.
 - b. Chemistry/Physics experiments- 3D models of the equipment will appear and by pressing a proceed/back button steps of the experiment will play out in reality.
3. A user(Teacher) can share his/her live AR interactions with other multiple users nearby without the internet and also remote users through the internet. In this case only the user sharing the screen can interact with the AR setting.
4. The user who is sharing can grant/revoke other users to control the AR setting (e.g- point out different parts in case of biology figures).

Interview Type

1. One to one interview- face to face or online.
2. Online survey- by releasing google forms.

Interview Group

1. **Tution Teachers**- We could not connect with any professional school/college teachers, instead we decided to choose University students with experience in tutiony and/or teaching in various coaching centers.
2. **High school students**- Currently attending school from classes 6 to 10.

Interview Questions for Students

1. *What is your name? Which school do you go to? Which class do you study in? What are some of your hobbies? [Icebreaking]*
2. *Do you own a smartphone? What model is it?*
3. *Do you play games on smartphones? Which ones?*
4. *Do you do online classes on a smartphone?*
5. *Do you use smartphones for any study-related purpose? If yes, what for? If not, any reason for avoiding it?*
6. *Do you like your school science books? Can you explain why/why not?*
7. *Do you know about Augmented Reality? If yes, what do you know?*

Interview Questions for Tution Teachers

1. *What is your name? How old are you? What do you do? [Icebreaking]*
2. *What smartphone do you use?*
3. *How long have you been tutoring? What subjects do you teach?*
4. *What is your preferred teaching material? Textbooks, guides, notes or some other medium? Can you explain why you prefer them?*
5. *Do you face any challenges teaching science or science related subjects? Can you explain?*
6. *Have you ever used smartphones to teach your students? If yes, what for? If not, any reasons for avoiding it?*
7. *Have you ever used Augmented Reality technology? If yes, what for?*

Online Survey Questions for Students

1. Which class do you study in? (choose one)
 - a. Class 1 to 5
 - b. Class 6 to 10
 - c. Above class 10
2. Do you know how to use smartphones? (choose one)
 - a. Yes
 - b. No
3. What do you do with smartphones? (can choose multiple)
 - a. Play Games
 - b. Use Facebook/Instagram/Whatsapp
 - c. Watch videos on Youtube
 - d. Online class
 - e. During studying
 - f. Others
4. Do you have a tuition teacher? (choose one)
 - a. Yes
 - b. No
5. Do figures given in science books help you understand better? (choose one)
 - a. Yes
 - b. No
6. Which study material helps you the most? (can choose multiple)
 - a. Text books
 - b. Guide books
 - c. Notes from tutors
 - d. Others (provide description)
7. Do you know what Augmented Reality is? (choose one)
 - a. Yes
 - b. No

Online Survey Questions for Tution Teachers

1. How old are you? (choose one)
 - a. Below 18 years old
 - b. 18 - 20 years old
 - c. 20 - 22 years old
 - d. Above 22 years old
2. How long have you been a tuition teacher? (choose one)
 - a. Few weeks
 - b. Few months
 - c. Few years
3. What subject have you taught? (can choose multiple)
 - a. Science related subjects (Physics, Chemistry, Biology etc)
 - b. Mathematics
 - c. Others (Social Science, Bangla, English etc)
4. What are your preferred teaching materials? (can choose multiple)
 - a. Text books
 - b. Guide books
 - c. Notes from other sources
 - d. Others (provide description)
5. Do you face any challenges teaching with those materials? Can you please explain?
(provide description)
6. Have you ever used smartphones for teaching students? (choose one)
 - a. Yes
 - b. No
7. How did you use a smartphone in teaching? Ignore if you haven't ever used smartphones for teaching. (provide description)
8. Have you ever used Augmented Reality technologies for teaching? (choose one)
 - a. Yes
 - b. No

9. What specific Augmented Reality technology did you use and what was your experience? Ignore this question if you haven't used Augmented Reality for teaching.
(provide description)