BACKEND UNIVERSITY EVALUATION

OVERVIEW

CLOUD (Google/AWS)

Mobile App

Android

WebApp

Upto 500K connections at a time

Website

Excel Table with links

Full Database acces and modification

Manual Input

Admin

Data Entry
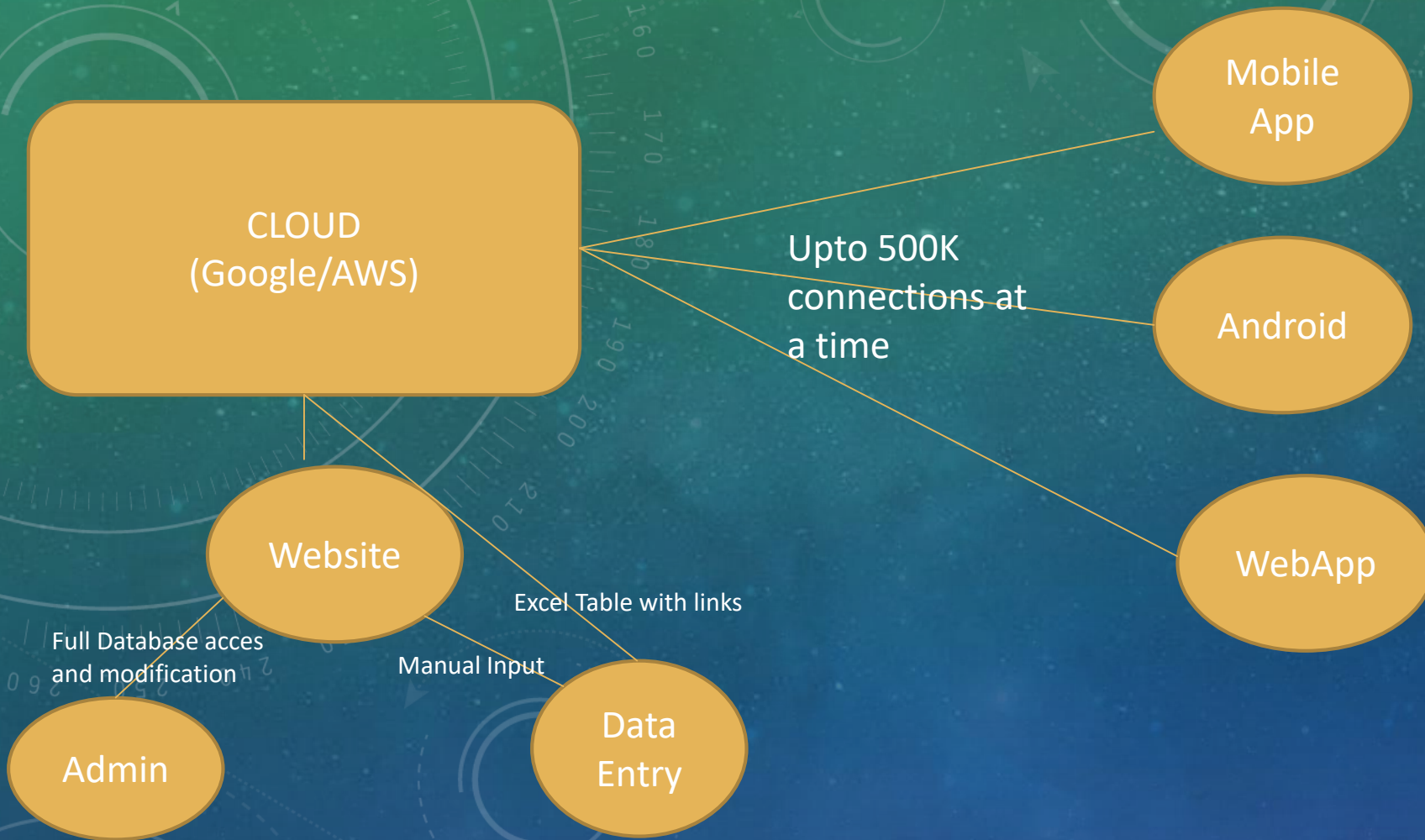
Backend
Host in AWS/Google
- Database distributed
- Roles inside the systems
  - Student
  - Admin Professor
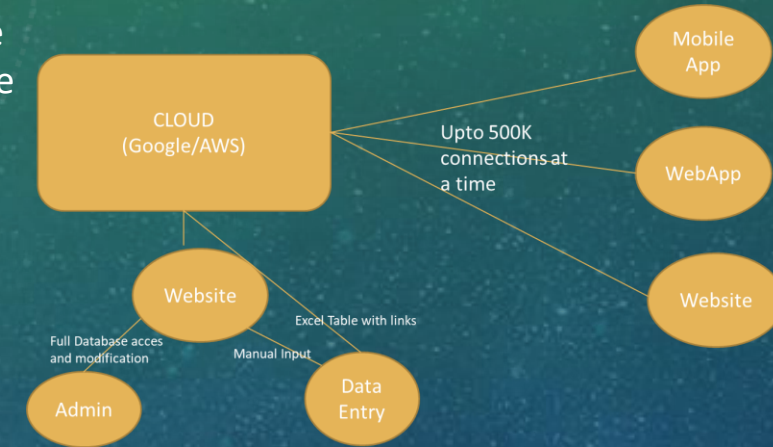 - Admin Lecturer
  - Admin Reporter

STEP 1 USECASES

High Level Phase 1:

- A system when the student logins get a set of 100 questions from a set of 35000 questions based on the specific text type imported by the admin. The questions are downloaded to the student device to handle network connectivity
- Camera of the student device is switched ON and the image is checked to avoid multiple persons (Implementation provided)
- An extensive report is created for the student providing an overview about multiple parameters
- A statistical report is generated for the admin about the ranking, mark of the students.

General:

- UC1: Creation of Database to hold a big set of questions and answers (text, image, audio, video) with each question having up to 20 fileds (Filed1, field2, field3…) The fields can be string, number, image, link to a video, audio etc
- UC2: Possibility to import a specific test type input containing different fields and the possibility to schedule always or on a particular date and time
- UC3: A report is generated based on the parameters provided

Admin Professor:

- UC1: Login to the server
- UC2: Import a set of questions and answers from an excel table (Text, images, Audio, Video). Excel has links to the audio, image, video as filenames present in directory relative to the excel location
- UC3: The admin is also able to select multiple fields with values and get all questions and possible to edit, delete or change
- UC4: Admin is also able to input new questions with all related fields
- UC5: Admin Professor is able to create admin Lecture roles and assign the fields to each lecture. When they login, only these questions with the filed type are available for editing or adding new questions
- UC6: Able to generate the result of the complete test with individual scores of the students
- UC7: Able to configure the report submission to students immediately or after a scheduled time.

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STEP 1 USECASES

Student Role:
- UC1: Register with email, name , address and password
- UC2: Entering possible Professions he is interested in.
- UC3: Login to the system and each login requires a secondary confirmation sent to email
- UC4: Selecting a particular Test displayed on the screen
- UC5: If the test is a paid test then goes to the payment gateway and get a confirmation code for the test(No actual integration needed , it is for future scalability purpose based on Nairobi Uni feedback)
- UC6: If the test is a free test then also a confirmation code is sent to the email
- UC7: Entering the confirmation code to access the test
- UC8: The test can be immediately available or it is scheduled at a particular time and corresponding screen is displayed
- UC9: The detailed reports of the tests taken are visible in the previous tests section for each student

Frontend:
- Admin: WebApp
- Student: WebApp/Android/iPhone