

Subject Examination of Objective Type

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Abstract: The project aims to develop a system for conducting examinations for two subjects using Python. The system will have six screens, and we will use python and Django to develop the application. The first screen will be the login screen, where the user will enter their username and password to access the system. The second screen will be the subject selection screen, where the user will select the subject they want to take the exam for. Once the user selects the subject, they will be directed to the third screen, which will display the instructions and rules for the exam. The fourth screen will be the question screen, where the user will be presented with the questions, and they will be required to select the correct option from the multiple-choice options. The fifth screen will display the result of the exam, showing the user's score and any feedback or remarks based on their performance. Finally, the sixth screen will be the exit screen, where the user can either exit the system or log out and return to the login screen. The system will be developed using Python, and it will use either Django as the framework and database respectively. The system will be designed to be user- friendly, intuitive, and secure to ensure a seamless examination experience for users. In conclusion, this project aims to develop a system that can be used to conduct examinations for two subjects using Python, providing a secure and user- friendly platform for user. At the end of the time the system goes to the results page and users get points to it. students, fixing the question papers,

Keywords : - Online Testing, Admin dashboard, Student dashboard, Registered

I. INTRODUCTION

The online objective examination system is run by a question technology bank to facilitate the activities of examinations such as defining examination patterns, defining examination timers, objective thematic question sections, conducting examinations without paper or computer or mobile devices. The objective exam system is an effective and scalable way to convert traditional pen and paper-based exams into online and paperless mode. Candidates can appear for the exam using any desktop, laptop or mobile device with a browser. Test results can be created quickly for objective type questions. This simplifies overall exam management and consequently generation activity. The system for application has to manage the examinations of various departments of the academy. To keep the information accurate and fast, they will manage the status information of that exam so that one can get the details of the exam according to their program. Previously, it was a very time consuming and tedious process where students and the university would do all the work manually, enrolling the

finally setting the schedule for announcing the results. This was difficult because these details were now generated, managed, and stored on a computer. The process became much easier when the computer system was introduced and for students they expected to come in person to register. Attend the examination at the examination center and for all those formalities. We are now expected to develop a web application that enables all of these functions as well as a capable web. There are already applications in this field that take their online exams.

II. LITERATURE REVIEW

many different researches have focused on the subject of an online examination system these work can be represented as following: SIETTE: Guzman and Conejo (2005) proposed an online examination system called System of Intelligent Evaluation using Tests for Tele-education (SIETTE). SIETTE is a web-based environment to generate and construct adaptive tests. It can be used for instructional objectives, via combining adaptive student self-assessment test questions with hints and feedback. SIETTE supports secure login and portability features. On the other hand, the other features: resumption capability, multi-instructor, random question selection, random questions distribution and random choices distribution are missing[3]. EMS :Rashad Et. Al. (2010) proposed a web-based online examination system called Exam Management System (EMS). EMS manages the examination and auto-grading for students exams and supports conducting exams, collects the answers, auto mark the submissions, and produce the reports for the test. EMS supports secure login, multi- instructor, and portability features. However, the other features: resumption capability, random question selection, random questions distribution, and random choices distribution are . ArvindSingh, NirajShirke, KiranShette 2011:

The project evaluates the examiners by using the online examination system concept. The exams will be totally customizable. This system will check

results automatically basing on students answers. CBTS :Fagbola et. al. (2013) developed a Computer Based Test System . CBTS is a web-based online examination system developed to address issues such as lack of timing flexibility for automation candidates log-off upon expiration of allowed time, result integrity, guaranty, stand-alone deployment, need for flexibility, robustness, designed to support the examination processes and overcome challenges framing the conduct of examination, auto- marking, auto- submission , and generation report of examination.

III.PROBLEM STATEMENT

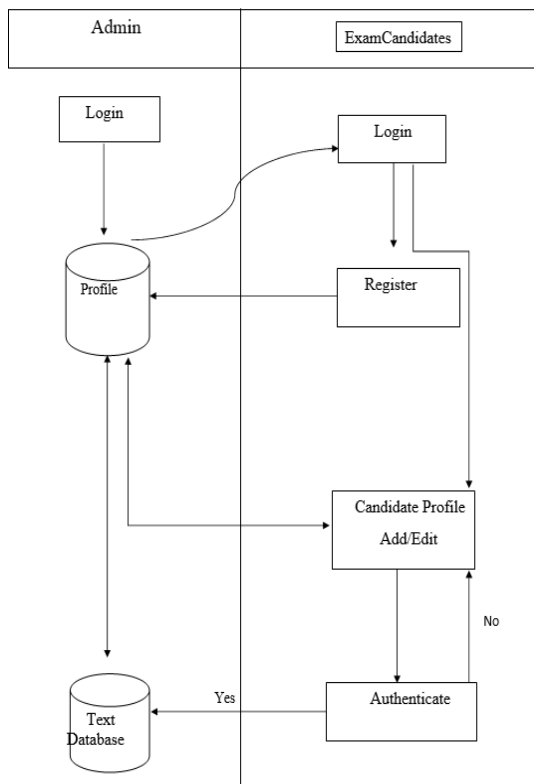
The problem with the current system is that students take their exams manually. This outdated system will be in use for a long time; The manual procedure used to conduct the examination is a time consuming process. With more time being used for lecturers to bring question papers and answer sheets and students need more time to write their exams, the current system of giving multiple choice exams is not satisfying the students. with the development of information technology and use it in an orderly and properly helps to overcome the existing error in the manual system

.We don't save the environment by using more paper than the manual process of taking exams, we are in a world where we really need to take care of the environment. Online examination system saves the exams information in a database, and this make it an easier way to give exam teachers can add theirs exams rules , and student can give exam a totall automatedsystem.

IV. METHODOLOGY

The Online objective examination website methodology has included the architecture. The ER diagram represents how the flow of a objective examination website. The Design of the system is done to predict the Online objective examination website using real-time data that can be fitted to a model.

ARCHITECTURE



7

Fig 1: Architecture design of online objective Exam portal

ER DIAGRAM

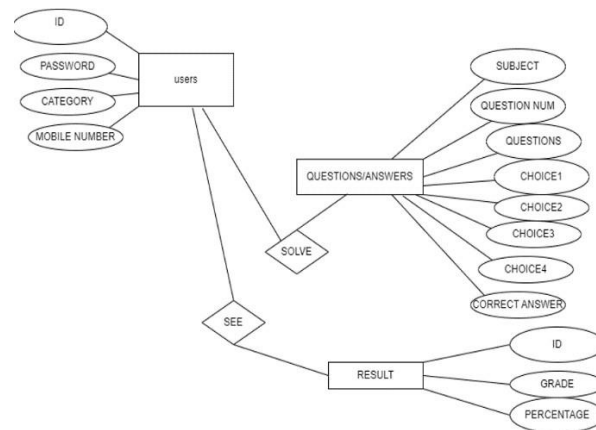


Fig 2: ER Diagram of online objectiveexam website

V. EXPERIMENTAL RESULTS

The system allow users to login in three ways either as an admin or student or admin

Home Page

The architecture of a online objective Exam involves various components and layers that work together to provide the required functionality. All the different blocks of architecture work together to make the website

user-friendly to the user.Different layers such I as application layer,integration layer,database layer,infrastructure layer works together to accomplish the problem statements.

ER DIAGRAM

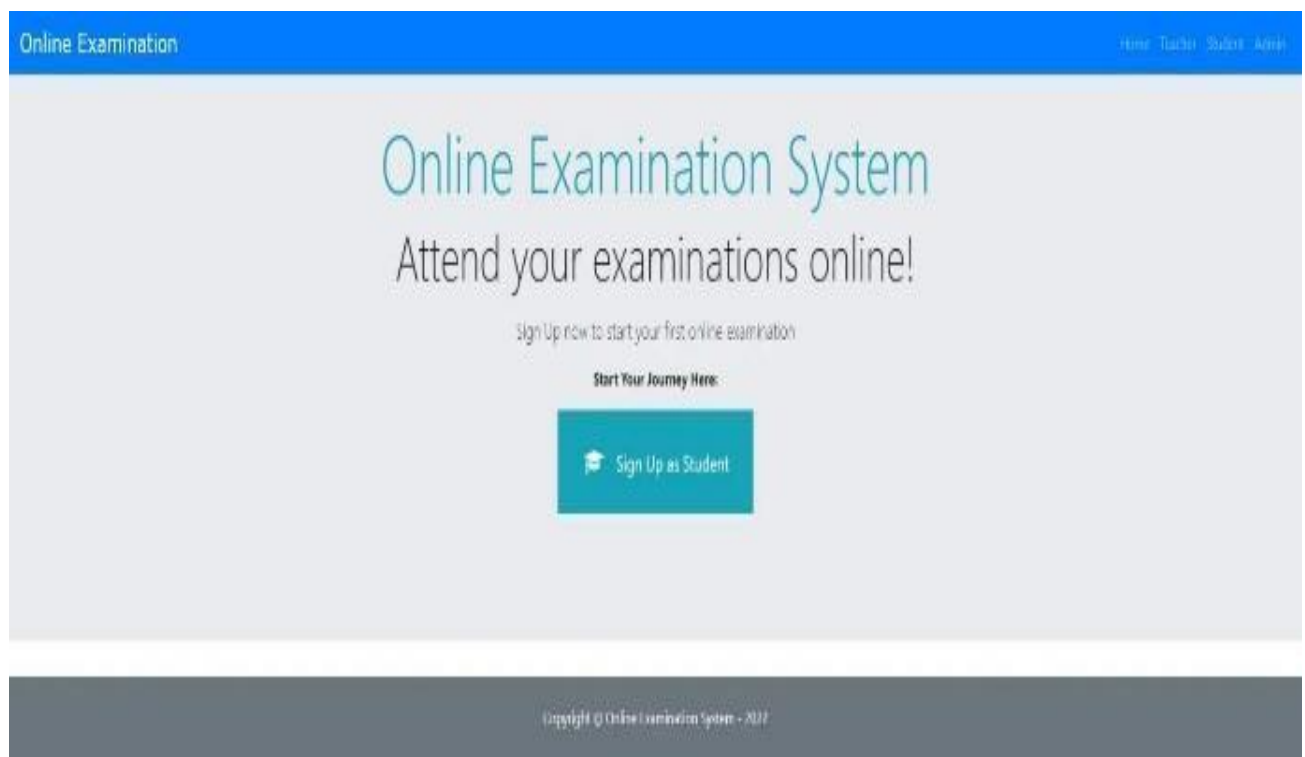
The E-R diagram shows the options and relations between them.The options are entities such as customer review,shipping type where the relations between them are presented.

Faculty Dashboard



The screenshot shows a 'Faculty Dashboard' for an 'ONLINE EXAM' system. The user is logged in as 'Claire [Teacher]'. The dashboard features a sidebar with navigation links: 'Dashboard', 'Manage Courses', and 'Manage Questions'. The main content area displays three summary cards: 'Registered Students' with a count of 1, 'Total Courses' with a count of 2, and 'Total Questions' with a count of 2. A 'Logout' button is visible in the top right corner. The footer indicates 'Copyright © Online Examination System - 2022'.

Category	Count
Registered Students	1
Total Courses	2
Total Questions	2



The screenshot shows the landing page of the 'Online Examination System'. The header includes 'Online Examination' and navigation links for 'Home', 'Teacher', 'Student', and 'Admin'. The main content area features the title 'Online Examination System' and the tagline 'Attend your examinations online!'. It encourages users to 'Sign Up now to start your first online examination' and provides a 'Start Your Journey Here:' section with a 'Sign Up as Student' button. The footer states 'Copyright © Online Examination System - 2022'.

Student Dashboard



The dashboard shows a sidebar with 'Mark' (Student), 'Dashboard', 'Exam Status', and 'My Study'. The main area displays 'Available Course' with a value of 2 and 'Total Questions' with a value of 2. A 'Logout' button is in the top right corner.

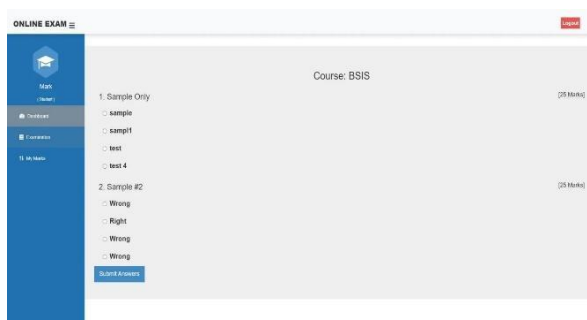
Exams Information



The page shows a table titled 'My Study' with columns: Course, Test Name, Number of Attempts, and Exam Date.

Course	Test Name	Number of Attempts	Exam Date
BSIS	test1	Attempt 1	June 7, 2023, 11:00 AM
BSIS	test1	Attempt 2	June 7, 2023, 11:00 AM

Exam page

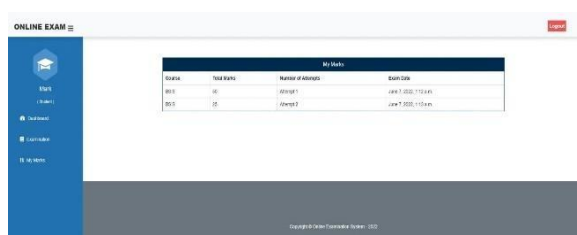


The page shows the exam interface for 'Course: BSIS'. It lists two sample questions:

- Sample #1 (25 Marks)
 - sample
 - sample1
 - test1
 - test 4
- Sample #2 (25 Marks)
 - Wrong
 - Right
 - Wrong
 - Wrong

A 'Submit Answers' button is at the bottom.

Result page



The page shows a table titled 'My Study' with columns: Course, Test Name, Number of Attempts, and Exam Date.

Course	Test Name	Number of Attempts	Exam Date
BSIS	test1	Attempt 1	June 7, 2023, 11:00 AM
BSIS	test1	Attempt 2	June 7, 2023, 11:00 AM

VI. CONCLUSION

In conclusion, the development of a simple online objective examination website using Django (Python) Our project is only a humble venture to satisfy the needs to manage their project work. Several user friendly coding have also adopted. This package shall prove to be a powerful package in satisfying all the requirements of the school. The objective of software planning is to provide a frame work that enables the manger to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses. At the end it is concluded that we have madeeffort on following points he description of Purpose, Scope, and applicability.

We define the problem on which we are working in the project. • We describe the requirement Specifications of the system and the actions thatcan be done on these things.We understand the problem domain and produce a model of the system, which describes operations that can be performedon the system

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VII. REFERENCES

- [1] D. Rhys Gwynllyw; Iain S. Weir; Karen L. Henderson. (2015). Using dewis and R for MULTISTAGED STATISTICS e-Assessments. Teaching Mathematics and Its Applications, 35(1), 14-26.
Doi:10.1093/teamat/hrv018
- [2] Hosseini E.; Ghafoor K. Z., Sadiq A. S., Guizani M., & Emrouznejad A. (2020). COVID-19 optimizer Algorithm, modelling and controlling of Coronavirus distribution process. IEEE Journal of Biomedical and Health Informatics, 24(10), 2765-2775.
Doi:10.1109/jbhi.2020.3012487
- [3] Tang Y., & Liu L. (2015). Privacy-preserving multikeyword search in information networks. IEEE Transactions on Knowledge and Data Engineering, 27(9), 2424-2437.
Doi:10.1109/tkde.2015.2407330
- [4] Meng D., Hou R., Shi G., Tu B., Yu A., Zhu Z., Yang Y. (2020). Built-in security computer: Deploying securityfirst architecture using active security processor. IEEE Transactions on Computers, 69(11), 1571-1583.
Doi:10.1109/tc.2020.3011748
- [5] Warin B., Talbi O., Kolsk, C., & Hoogstoel, F. (2016). Multi-Role project (MRP): A New project-based learning method for STEM. IEEE Transactions on Education, 59(2), 137-146.
Doi:10.1109/te.2015.24