



Parshvanath Charitable Trust's
A. P. SHAH INSTITUTE OF TECHNOLOGY, THANE
(All Programs Accredited by NBA)

Department of Information Technology



Automatic Question Paper Generator System

Group No. 6

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Project Guide – Prof. Yaminee Patil

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Introduction

- Question Paper Generator is a special and unique software, which could be used in schools, institutions, colleges, where test paper setters will have a huge database of questions for frequent generation of question.
- This software can be implemented in various medical, engineering and coaching institutes for theory paper.
- You can create random question paper with this software anytime within seconds.
- You can enter unlimited units and chapter depending upon the system storage, capacity and as per the requirement.

Objectives

- Question entered in the database should fulfil the Course Objectives and should cover the Syllabus.
- Question Paper formed should address the desired Course Objectives
- Question Paper formed should follow Blooms Taxonomy
- Question Paper formed should be confirmed by the NBA co-ordinator.
- Export questions from the system directly to Moodle

Problem Definition

- The existing system for Question Paper Generation requires human staff to chalk out questions that appear in the question paper. Question Paper creation is a tedious and time consuming task
- To create a system which reduces Human Working process and also The Instructor to generate and Save The Question Paper Automatically.

Technological Stack

- **HARDWARE**

- Processor type: Minimum:- Intel Pentium 3/ Pentium 4
Recommended:- Intel Core 2 duo or higher
- Processor Speed:- 2.1Ghz or more
- RAM:- Minimum:- 2GB DDR3 RAM
Recommended:- 4GB DDR3 RAM
- Hard Disk Space:- 160GB Hard Disk space

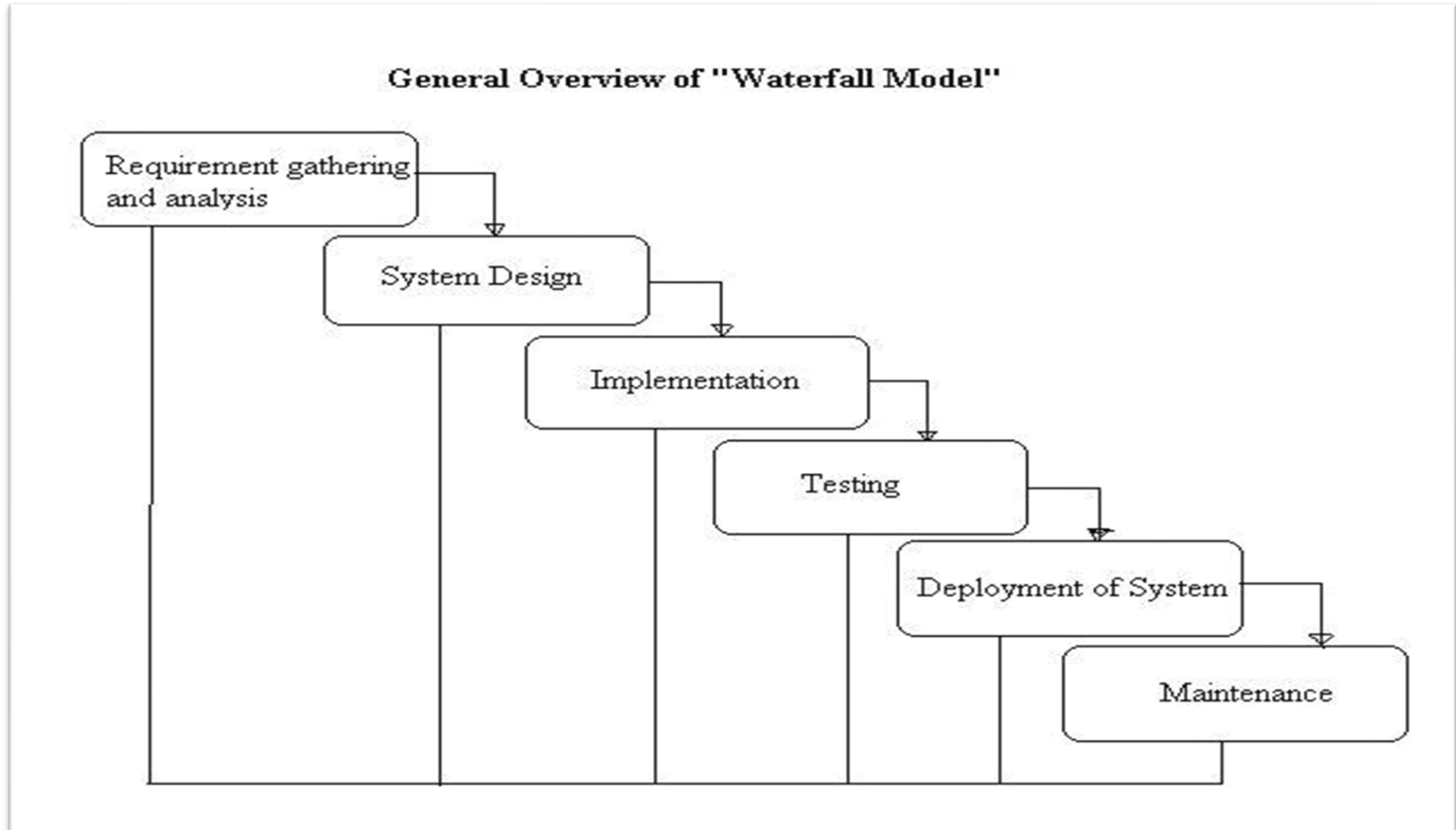
Technological Stack

- **SOFTWARE**

- Operating System: Windows XP/2000/Vista/7/8/10 or Linux or MacOS
- Languages used: PHP, JavaScript, HTML, CSS, XML
- Algorithm Used- Shuffling Algorithm
- Database:- MySQL Database
- Browser:- Testing Enviornment

Proposed System Architecture/Working

Process Model: Waterfall Model



Proposed System Architecture/Working

- Considering the short coming of conventional system, an eager need was felt to redesign the whole system.
- Automatic Question Paper Generator is a special software which is useful to schools, Institutes, publishers and test paper.
- It mainly deals with the gathering, sorting and administration of a large amount of questions about different levels of toughness from scientific as well as non-scientific subjects related to various classes
- The main aim of our system is to provide randomization technique with the help of Shuffling Algorithm in question paper generation system fulfilling the Course Objectives according to the Bloom's Taxonomy, thus different sets of question could be generated without repetition and duplication and could be sent to the NBA co-ordinator for confirmation and approval.
- Security Features:-
 - a. Password facility to ensure validity of user
 - b. Data Secrecy

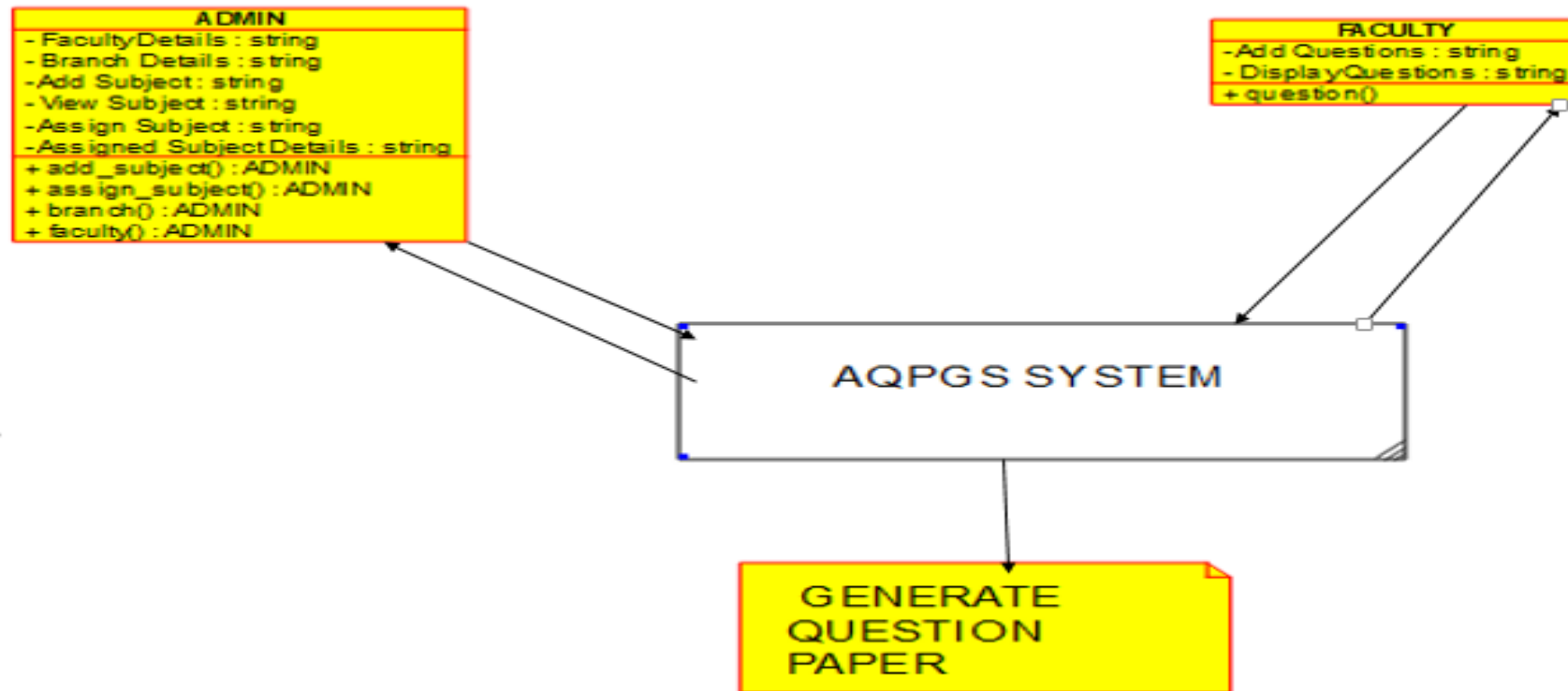
Proposed System Architecture/Working

- **Working of the Proposed System:**

- User can register itself on the system on the registration page, wherein the user has to enter name, Email id and Password or can directly click on the Google Registration to login using the users Gmail id.
- Before user is able to access system, it is necessary to pass the authentication step through login form where user must enter the correct username and password given by system administrator. If user has administrator role, login form will redirect to Admin Portal. If login details match a Faculty role, user will be redirected to Faculty Portal.
- The user can login to the portal using the login form where the authorized user is allowed to login. the user needs to enter username and the password. The user can be of 2 types. Here its either the faculty or the admin.

Proposed System Architecture/Working

- Working of the Proposed System:



Proposed System Architecture/Working

- **Working of the Proposed System:**

If the user is admin then the privileges are :-

- 1) Faculty details : In this admin has the power to approve or disapprove faculty or even delete faculty on clicking the respective button.
- 2) Branch details: In this the new branches can be added using the branch name and click on the add branch button. It can be checked with the list given below. It can also be deleted later if no longer required.
- 3) Add subject: In this new subject can be added by entering new subject name, choosing the respective branch and finally click on the add subject button.
- 4) View subject: view the list of subjects available. Admin can also search using subject name. Or delete it.
- 5) Assign subject: click on the dropdown menu, select the faculty from the list and click search. a box appears where the subject must be chosen and click on assign button.
- 6) Assigned subject details: it displays subject name, also it has the faculty record button which shows the list of faculty assigned to particular subject. Delete button is used to remove the faculty assigned to particular subject.

Proposed System Architecture/Working

- **Working of the Proposed System:**

If the user is faculty then the privileges are:-

- 1) Add Questions: User can add question for a particular subject which is assigned by the admin to the user.
- 2) Display question: In this section user will see the questions entered by all the faculties and the user can also edit questions which are entered by him only.

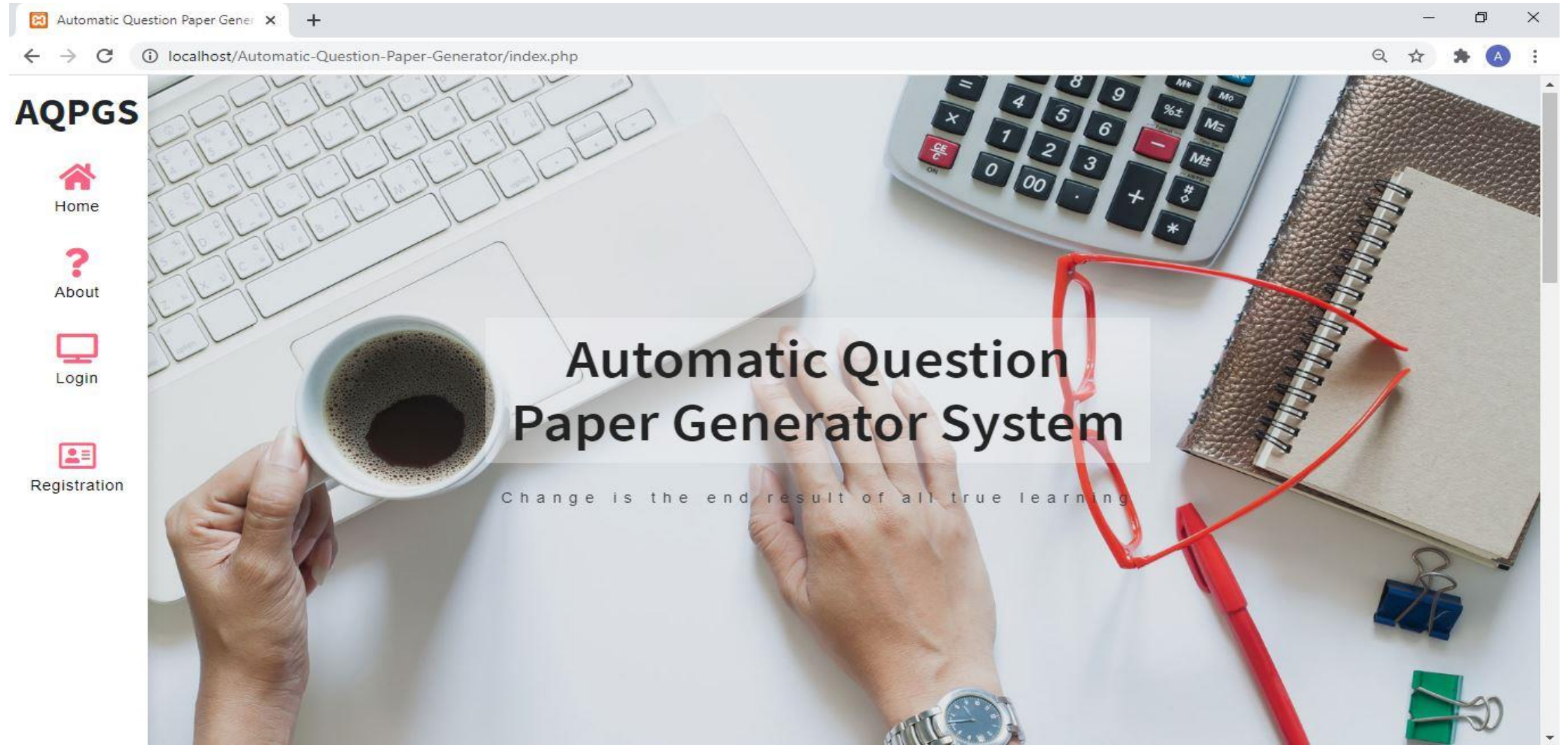
Proposed System Architecture/Working

- **Working of the Proposed System:**

- AQPG system retrieves questions from question bank using randomization and shuffling algorithm. Every word in questions' content is compared against specified **Bloom's Taxonomy** and **Course Objectives** categorization verbs acting as query keywords.
- If any question contains a verb matched as the specified keyword, it is placed in the respective section based on complexity level.
- This process is performed until the specified set of questions is retrieved. Upon receiving the specified set of Questions, the Faculty can select the required questions from retrieved set of Questions to form the Question Paper.
- After this the System checks the redundancy of the question's i.e. whether or not it is repeated question or not then it checks if the Question Paper is fulfilling the required Course Objectives.
- If Yes, the Faculty/Admin can click on the Generate Question Paper Button.
- If No, then a prompt message will appear before the user.
- Upon clicking "Generate Question Paper" button, Faculty/Admin is able to download generated question paper or the Faculty/Admin can simply email the Question Paper or click "Cancel" to abort generation.

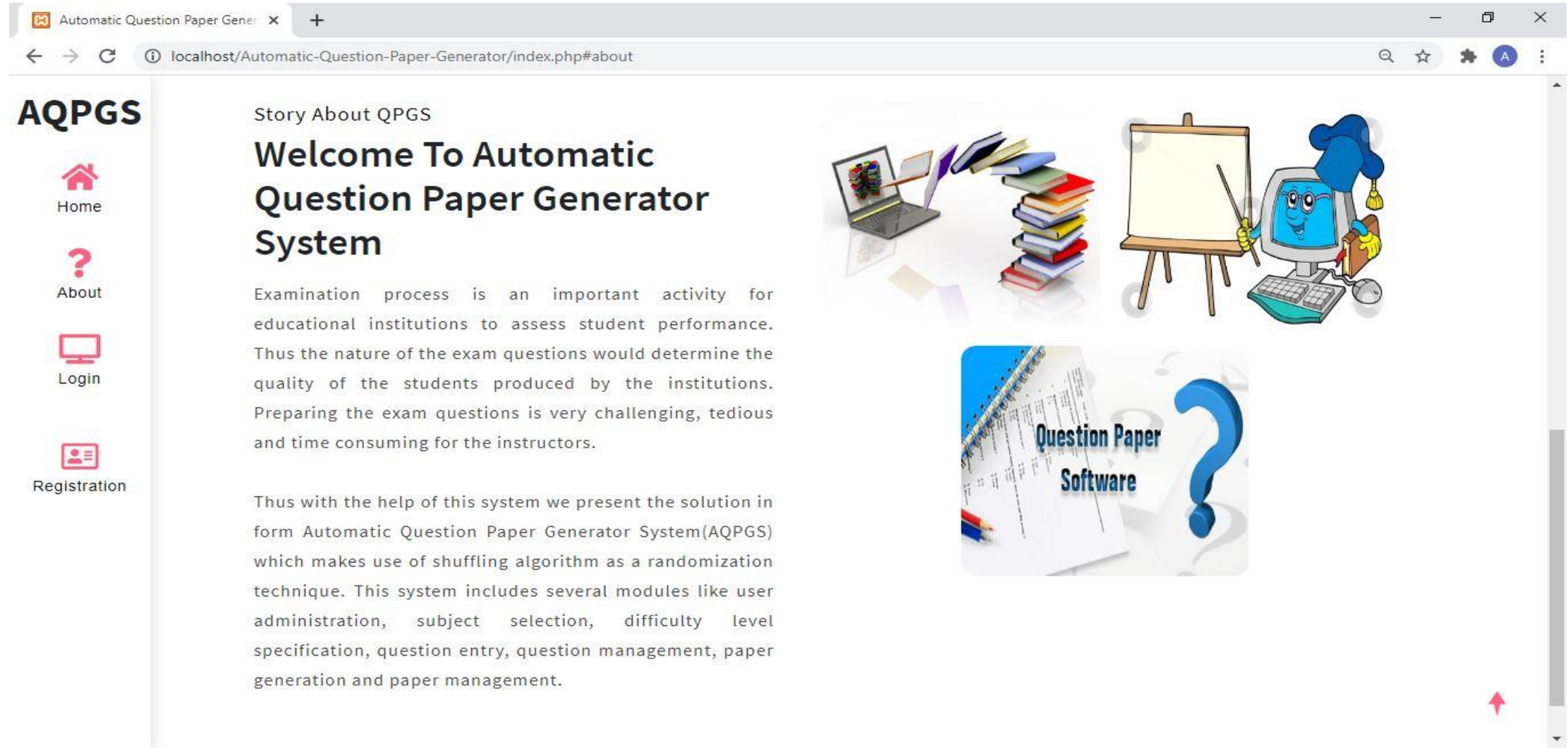
Prototype Design Demonstration

Index Page



Prototype Design Demonstration

About Page



Prototype Design Demonstration

Registration Form

Question paper generator

localhost/Automatic-Question-Paper-Generator/faculty/registration.php

SIGN UP

Fullname

Phone Number

Email

Select Department

Password

confirm password

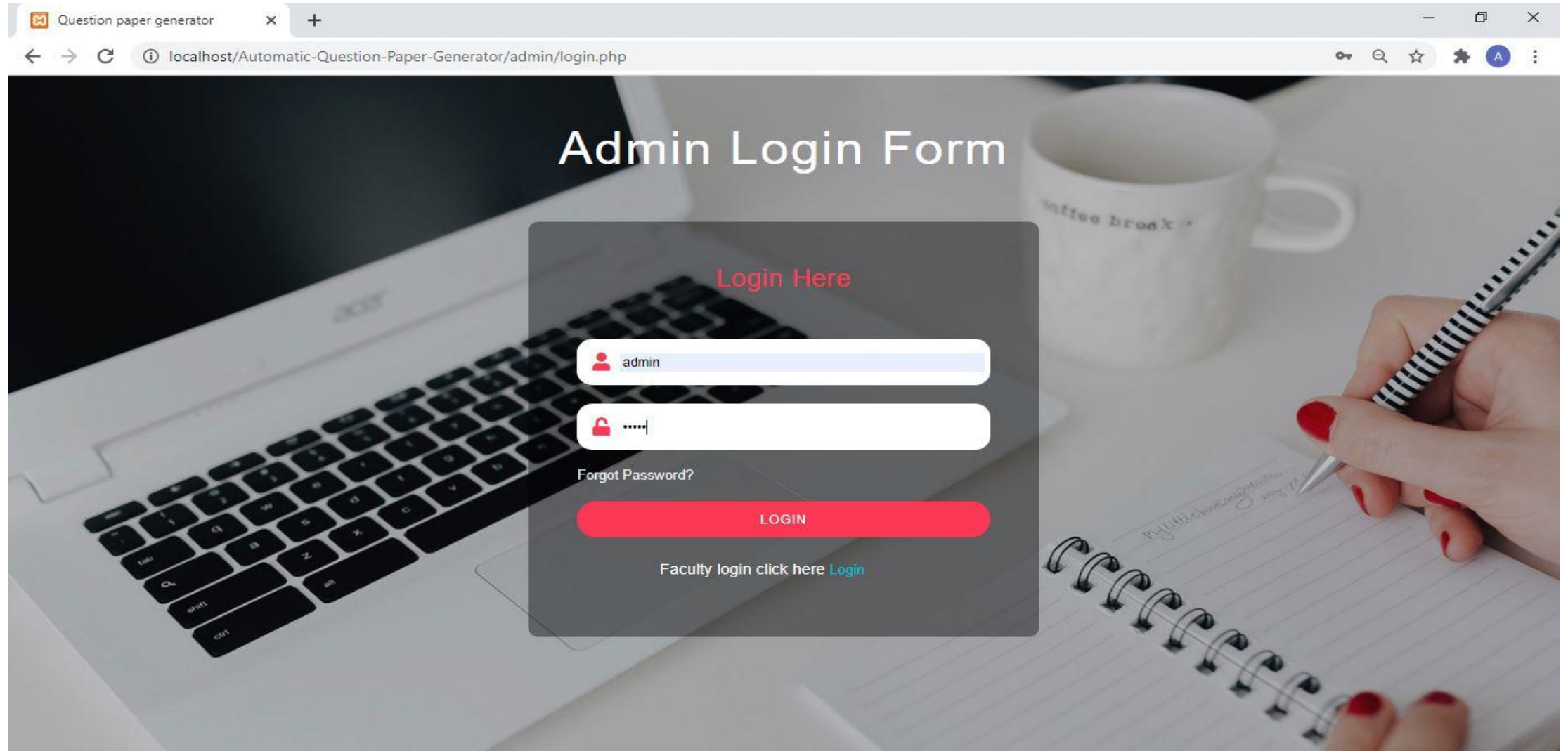
SIGN UP

Already have an account? [Login](#)

Go to Home page [Home](#)

Prototype Design Demonstration

Admin Login Form



The image shows a web browser window with a single tab titled "Question paper generator". The address bar displays the URL "localhost/Automatic-Question-Paper-Generator/admin/login.php". The page content features a background image of a laptop, a coffee cup, and a hand writing in a notebook. Overlaid on this is a dark gray login form with the title "Admin Login Form" in white. Inside the form, the text "Login Here" is in red. There are two input fields: the first contains the username "admin" and has a red user icon; the second contains masked characters "...." and has a red lock icon. Below the password field is a link "Forgot Password?". A red "LOGIN" button is positioned below the links. At the bottom, a text link reads "Faculty login click here [Login](#)".

Question paper generator

localhost/Automatic-Question-Paper-Generator/admin/login.php

Admin Login Form

Login Here

admin

....

[Forgot Password?](#)

LOGIN

Faculty login click here [Login](#)

Prototype Design Demonstration

Faculty Details

The screenshot displays a web browser window with the URL `localhost/Automatic-Question-Paper-Generator/admin/display_faculty_info.php`. The application interface includes a dark sidebar with the logo 'AQP GS' and a welcome message 'Welcome, ADMIN'. The sidebar menu contains the following items: FACULTY DETAILS (active), BRANCH DETAILS, ADD SUBJECTS, DISPLAY SUBJECTS, ASSIGN SUBJECT, SUBJECT ASSIGN INFORMATION, and GENERATE QUESTION PAPER. The main content area is titled 'Faculty Information' and contains a table with the following data:

Faculty Id	Faculty Name	Contact	Email	Branch	Status	Approve	Disapprove	Delete Faculty
26	Yaminee Patil	8888818292	ympatil@apsit.edu.in	IT	yes			

Prototype Design Demonstration

Branch Details

CBCS

localhost/Automatic-Question-Paper-Generator/admin/add_branch.php






Add Branch

Branch Id

Branch Name

Add Branch

Branch Details

Branch Id	Branch Name	Delete Branch
CE	Civil Engineering	
COMPS	Computer Engineering	
EXTC	Electronics and Telecommunication Engine	
IT	Information Technology	
ME	Mechanical Engineering	

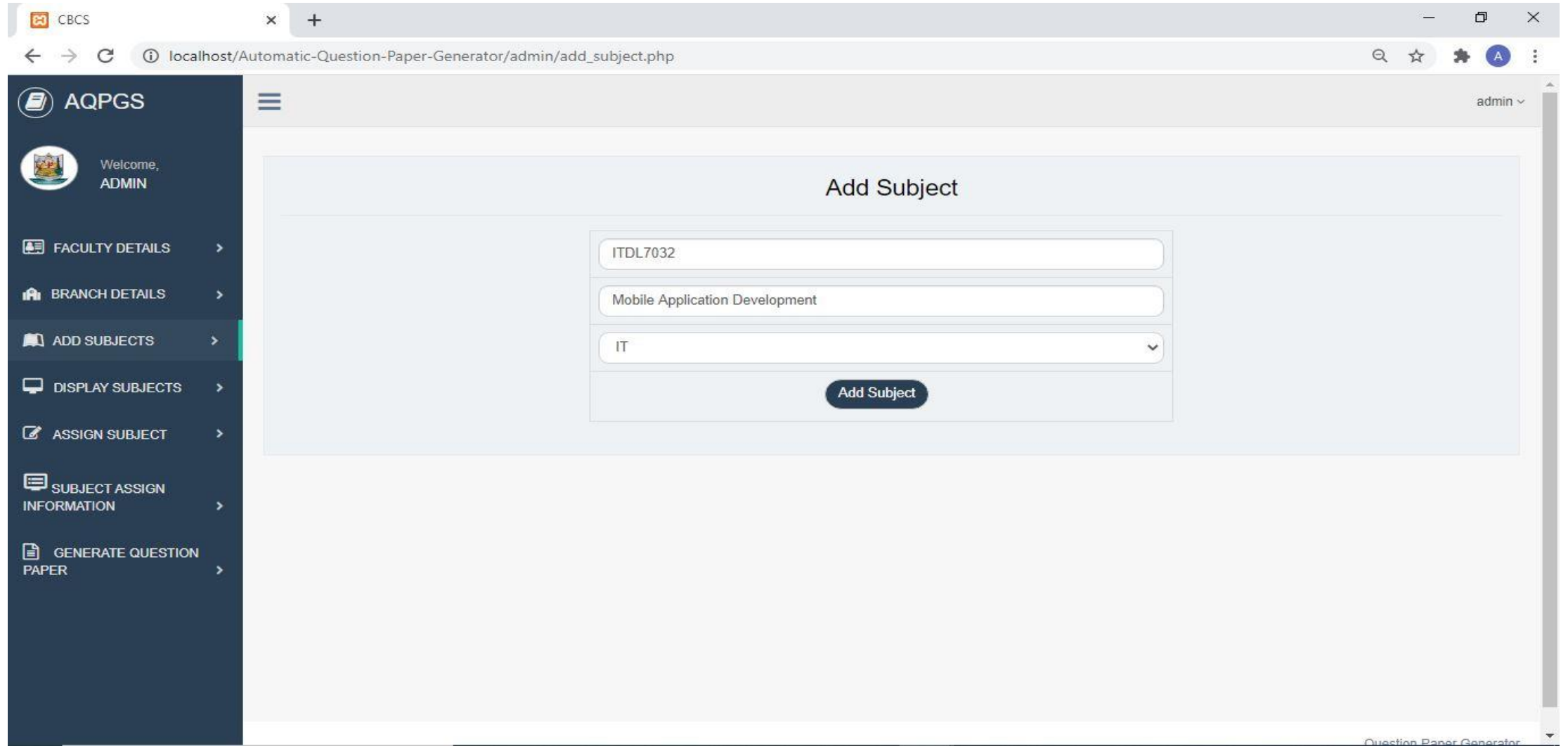
ADMIN

- FACULTY DETAILS
- BRANCH DETAILS
- ADD SUBJECTS
- DISPLAY SUBJECTS
- ASSIGN SUBJECT
- SUBJECT ASSIGN INFORMATION
- GENERATE QUESTION PAPER

Question Paper Generator

Prototype Design Demonstration

Add Subjects Page



The screenshot shows a web browser window with the address bar displaying `localhost/Automatic-Question-Paper-Generator/admin/add_subject.php`. The browser's address bar also shows the text "CBCS". The page features a dark blue sidebar on the left with the "AQP GS" logo and a list of navigation items: "FACULTY DETAILS", "BRANCH DETAILS", "ADD SUBJECTS" (which is highlighted with a green bar), "DISPLAY SUBJECTS", "ASSIGN SUBJECT", "SUBJECT ASSIGN INFORMATION", and "GENERATE QUESTION PAPER". The main content area has a light blue header with a hamburger menu icon and the text "admin". Below the header, the title "Add Subject" is centered. The form contains three input fields: the first contains "ITDL7032", the second contains "Mobile Application Development", and the third is a dropdown menu currently showing "IT". A dark blue "Add Subject" button is positioned at the bottom of the form.

CBCS

localhost/Automatic-Question-Paper-Generator/admin/add_subject.php

AQP GS

Welcome, ADMIN

FACULTY DETAILS >

BRANCH DETAILS >

ADD SUBJECTS >

DISPLAY SUBJECTS >

ASSIGN SUBJECT >

SUBJECT ASSIGN INFORMATION >

GENERATE QUESTION PAPER >

admin

Add Subject

ITDL7032

Mobile Application Development






IT

Add Subject

Prototype Design Demonstration

Display Subjects Page

The screenshot shows a web browser window with the URL `localhost/Automatic-Question-Paper-Generator/admin/display_subjects.php`. The application is titled "AQP GS" and displays a sidebar with navigation options: FACULTY DETAILS, BRANCH DETAILS, ADD SUBJECTS, DISPLAY SUBJECTS (highlighted), ASSIGN SUBJECT, SUBJECT ASSIGN INFORMATION, and GENERATE QUESTION PAPER. The main content area is titled "Display Subjects" and features a search bar labeled "Subject" with a magnifying glass icon. Below the search bar is a table with three columns: Subject Code, Subject Name, and Delete Subject. The table lists five subjects: ITC701 (Enterprise Network Design), ITC702 (Infrastructure Security), ITC703 (Artificial Intelligence), ITDL7032 (Mobile Application Development), and ITDL7034 (Software Testing and Quality Assurance). Each subject has a red delete icon in the Delete Subject column. The user is logged in as "admin".

Subject Code	Subject Name	Delete Subject
ITC701	Enterprise Network Design	
ITC702	Infrastructure Security	
ITC703	Artificial Intelligence	
ITDL7032	Mobile Application Development	
ITDL7034	Software Testing and Quality Assurance	

Prototype Design Demonstration

Assign Subjects Page

The screenshot shows a web browser window with the URL `localhost/Automatic-Question-Paper-Generator/admin/assign_subject.php`. The page is titled "Assign Subject" and features a sidebar with navigation options: FACULTY DETAILS, BRANCH DETAILS, ADD SUBJECTS, DISPLAY SUBJECTS, ASSIGN SUBJECT (highlighted), SUBJECT ASSIGN INFORMATION, and GENERATE QUESTION PAPER. The main content area includes a search bar with "Yaminee Patil" entered, a text input field with "26", a dropdown menu with "Mobile Application Development", and an "Assign" button.

CBCS

localhost/Automatic-Question-Paper-Generator/admin/assign_subject.php

AQPGS

Welcome, ADMIN

FACULTY DETAILS

BRANCH DETAILS

ADD SUBJECTS

DISPLAY SUBJECTS

ASSIGN SUBJECT

SUBJECT ASSIGN INFORMATION

GENERATE QUESTION PAPER

Assign Subject

Yaminee Patil

26

Mobile Application Development

Assign

Prototype Design Demonstration

Subjects Assigned Information Page

This screenshot shows the 'Assigned Subject Details' page in the AQPGS system. The page features a sidebar with navigation options: FACULTY DETAILS, BRANCH DETAILS, ADD SUBJECTS, DISPLAY SUBJECTS, ASSIGN SUBJECT, SUBJECT ASSIGN INFORMATION (highlighted), and GENERATE QUESTION PAPER. The main content area displays a table with five columns, each representing a different subject assignment. Each column includes the subject name, subject code, and a red 'Faculty Record' link.

Subject Name: Enterprise Network Design Subject Code: ITC701	Subject Name: Infrastructure Security Subject Code: ITC702	Subject Name: Artificial Intelligence Subject Code: ITC703	Subject Name: Mobile Application Development Subject Code: ITDL7032	Subject Name: Software Testing and Quality Assurance Subject Code: ITDL7034
Faculty Record	Faculty Record	Faculty Record	Faculty Record	Faculty Record

This screenshot shows the 'Faculty List' page in the AQPGS system. The page features a sidebar with navigation options: FACULTY DETAILS, BRANCH DETAILS, ADD SUBJECTS, DISPLAY SUBJECTS, ASSIGN SUBJECT, SUBJECT ASSIGN INFORMATION, and GENERATE QUESTION PAPER. The main content area displays a table with six columns: Faculty Id, Faculty Name, Email, Branch Id, Subject, and Delete. A single faculty record is listed in the table.

Faculty Id	Faculty Name	Email	Branch Id	Subject	Delete
26	Yaminee Patil	ympatil@apsit.edu.in	IT	Mobile Application Development	

Prototype Design Demonstration


Faculty Login Form


Question paper generator

localhost/Automatic-Question-Paper-Generator/faculty/login.php

Faculty Login Form

Login Here

 ympatil@apsit.edu.in



[Forgot Password?](#)

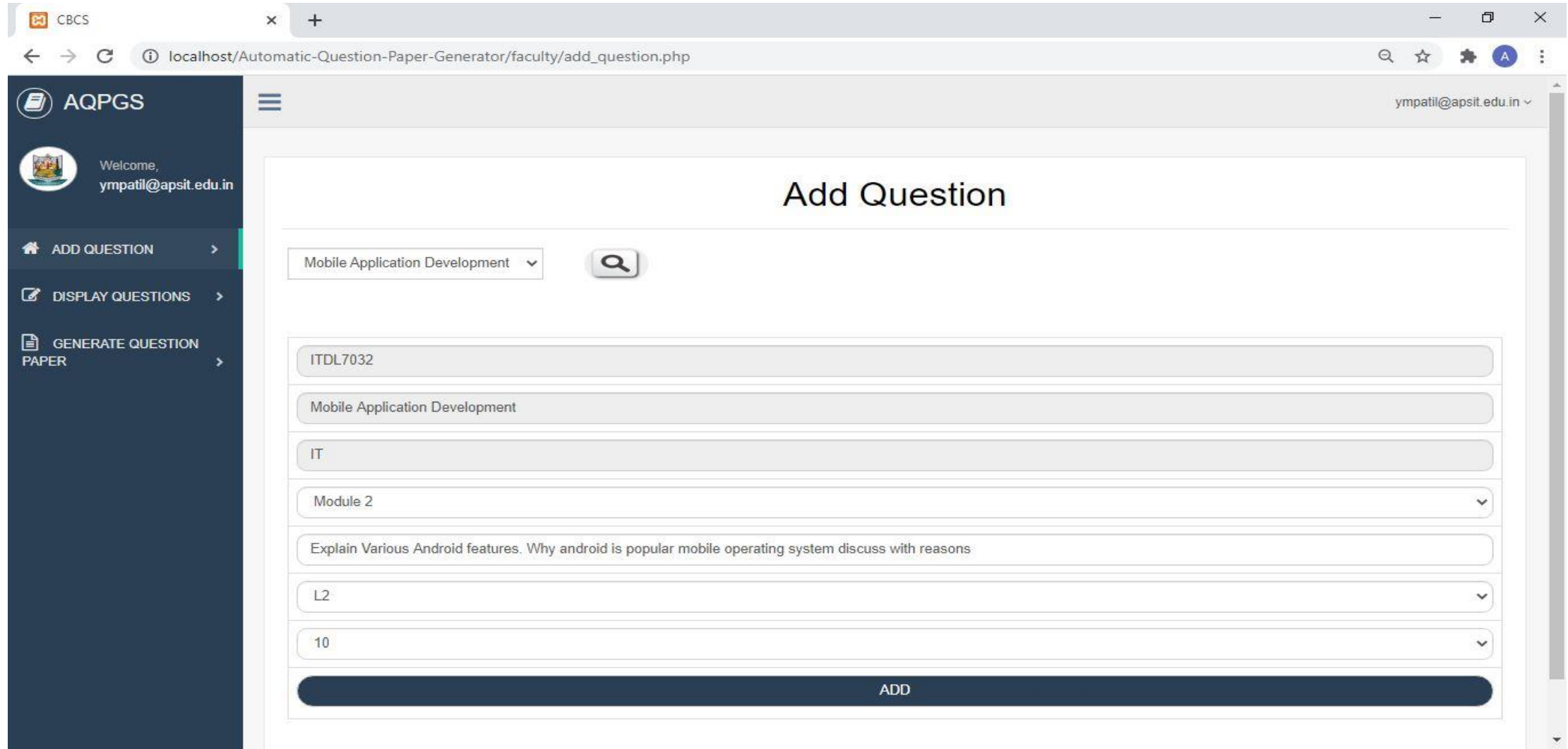
[LOGIN](#)

For admin login click here [Admin](#)

Don't have an account? [Register](#)

Prototype Design Demonstration

Add Question Page



The screenshot displays a web browser window with the URL `localhost/Automatic-Question-Paper-Generator/faculty/add_question.php`. The application is titled "AQP GS" and shows a welcome message for `ympatil@apsit.edu.in`. The sidebar contains three main navigation options: "ADD QUESTION", "DISPLAY QUESTIONS", and "GENERATE QUESTION PAPER". The main content area is titled "Add Question" and features a form with the following fields:

- Subject:** A dropdown menu currently set to "Mobile Application Development".
- Course Code:** A text input field containing "ITDL7032".
- Topic:** A text input field containing "Mobile Application Development".
- Unit:** A text input field containing "IT".
- Module:** A dropdown menu currently set to "Module 2".
- Question Text:** A text input field containing "Explain Various Android features. Why android is popular mobile operating system discuss with reasons".
- Level:** A dropdown menu currently set to "L2".
- Marks:** A dropdown menu currently set to "10".

At the bottom of the form is a large blue button labeled "ADD".

Prototype Design Demonstration

Display Questions Page

CBCS

localhost/Automatic-Question-Paper-Generator/faculty/display_questions.php

AQPGS

Welcome,
ympatil@apsit.edu.in

ADD QUESTION

DISPLAY QUESTIONS

GENERATE QUESTION PAPER

ympatil@apsit.edu.in

Questions

Mobile Application Development

All Questions

My Questions

Difficulty Level

Module	Question Id	Question	Marks	Difficulty
1	724	Discuss the Android Architecture with all layers. Also discuss the role of DVM in detail.	10	L3
1	734	What is the Role of Android.Manifest.xml file in Android	5	L2
2	725	Explain Various Android features. Why android is popular mobile operating system discuss with reasons	10	L2
2	729	Discuss the various Layout in Android. Demonstrate any Layout with suitable example.	5	L2
2	733	Discuss what type of App we can build using Location API in Android. Also explain how to get the current location of User in Android Apps.	10	L2
3	731	Discuss how SQL Lite is different than other database approach in android. Write a code in SQL Lite to fetch a data from any table and display on screen using cursor.(Assume table is already created with sample records in it)	10	L3
3	732	Explain the Camera API in Android with suitable examples.	10	L2
3	735	Write a short note on Android App publishing	5	L1
3	736	Android Download Manager	5	L2
3	737	Write a short note on Android Security Issues	5	L3

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Plan Of Paper Publication

- Drafting of Paper complete.

Sr No.	Conference Name	Publication Name	Status
1.	ICACDS Nashik	Springer	Paper submitted. Awaiting Notification of Acceptance
2.	IEEE Conference, Bengaluru	IEEE	Paper Ready. To be submitted in a day or two.

Thank You...!!