CS251 SOFTWARE ENGINEERING 1

COURSE PROJECT INSTRUCTIONS SPRING 2021

Instructions to Students:

o This is a group work project. Each group consists of **FIVE or EIGHT students** (group members must be approved by the TA through registration). Each group must develop the idea assigned to them using **Object Oriented Technologies** & PHP. *Please note that every individual idea (from the provided list) can be assigned to a limited number of teams.*

o **Project Objectives:** The objectives of this project can be summarized in the following:
  o Eliciting, Analysing, Validating, Specifying, & Managing the Software Requirements.
  o Using Software Engineering Processes and approaches, & UML diagrams in developing *(both designing & implementing)* an Object-Oriented-based application.
  o Applying design & architectural patterns.
  o Testing.

o **Submission:** Submission is done according to the following schedule:
  o **Week 4:** Registering your team.
  o **Week 8:** Phase 1 Discussion *(detailed schedule TBA later)*.
  o **Week 12:** Phase 2 Discussion *(detailed schedule TBA later)*.

o **Assessment:** Assessment will be on the reports and code submitted, in addition to discussions with team members. All the team members must contribute to all the phases, and the role of each member must be clearly stated in each report. The Project will be assessed based on the following criteria:
  o The complexity determined by the number of functionalities covered by your project.
  o The quality of your documentation.
  o The correctness of your analysis and design diagrams.
  o Design Quality: using patterns, levels of abstractions, etc.
  o Implementation correctness.

o **Feedback:** Feedback, for each group, will be given by the teaching assistants during the submission of each phase. Further details could be provided through discussion during office hours with the teaching assistants.

o You can only submit your own work. Any student suspected of plagiarism will be subject to the procedures set out in by the Faculty *(including failing the course entirely)*. **Academic Integrity:** Helwan University's policies on academic integrity will be enforced on students who violate University standards of academic integrity. Examples of behaviour that is not allowed are:
  o Copying all or part of someone else's work and submitting it as your own;
  o Giving another student in the class a copy of your work; and
  o Copying parts from the internet, text books, etc.
  o If you have any questions concerning what is allowed, please don't hesitate to discuss with me.

CS251 SOFTWARE ENGINEERING 1 SPRING 2021

COURSE PROJECTS' DESCRIPTIONS (24 IDEAS)

Contents

1. Product Review Analysis for Genuine Rating

This system is used to help a user to get a product at its best choice and best price. This system allows the user to look into a product with different reviews and rating rated by other users and for his simplicity the system shows the overall average rating of that product. The System also allows the user to compare 2 products of the same kind or same category and to rate and review the product as he wishes too but limiting to only once per product. The System is meant to give a rough as well as a much detailed idea of whether the user should go for a product. The System gives a list of sellers and its price offered which is added by the admin for the user's convenience and preference. The Users role is to check out for the product using all the resources offered by the system in finding the best product and give his rating and review. The User is also allowed to give his feedback. The Admin is responsible to add update or delete a product while adding seller's information as well and likewise view users and their feedbacks.

Admin:
- **Add Product:** The Admin adds a product by filling all the details related to the product along with the seller's information.

- **View Product:** The Admin can also filter the product based on their category and view all the product details with the ratings by the users.

- **Edit Product**: The Admin is allowed to modify the product details as well as delete a product.

- **View User:** The Admin gets a list of all the users with all their details.

- **View Feedback**: The Admin is allowed to monitor all the feedbacks sent by the users and delete if they are irrelevant.

User:
- **Registration:** The user has to register into the System with all his basic details.

- **Login**: The user has to login into the system and then can he make use of the system resources. The user need not login all the time; once he's logged in he is remembered until he logs out.

- **View Category**: The user can view all the products based on the category.

- **View Product**: The user can view a single product with all the details namely; pictures, overall ratings, sellers information, description and ratings/reviews.

- **Rate/Review**: The user is allowed to rate and review a product only once.

- **Compare**: The user can compare to products of the same kind/category.

- **Feedback**: The user can give his feedback about the system or product.

- **Update Details**: The user is allowed to update or modify few of its details.

Advantages:
- The System should have an active internet connection.

- The user has to Login to make use of the system keeping the data secure.
- The system helps the user to get the best product with many resources.
- Minimizes user's time.
- User can rate and review a product.

2. Campus Portal with Graphics Reporting

This system is basically used to make use of the resources that will the help the student to gain all the information that a Student needs from the portal in the form of reports and simple to use. The Admin is responsible to add a student, course and likewise update the marks of the student based on weekly Test and PT1 and PT2. The password is generated by the system which will be sent to the students mail Id. The Admin adds the Booklets and Test Solutions i.e. pdf that can assist the student. The Admin adds the Timetable and the Schedule which are images. The Admin also add the Video Links to help the student for references. The Marks are basically the Graphical Reports using the Line, Bar and Pie Charts. The Student logins to the app with his credentials and uses the portal and gets whatever is available. The App makes it very easy to use and makes it simple to navigate between different things on portal.

The Student can view timetable, schedules and can watch video links for references. For ease the work there are booklets and test solutions will can be viewed and downloaded. The Student can keep himself updated and his progress with Graphical Reports. The Line Chart shows 3 parts the average Marks, highest Marks and the students marks to see where he ranks on the academic level.

Admin:
- **Add Student:** The Admin adds the student and the password is generated by the system and sent to the students Mail Id.

- **Add Course:** The Admin is allowed to add the Course and its Subjects semester wise.

- **Add Timetable**: The Admin is allowed to add the timetable for the course semester wise in the form of an .jpg

- **Add Schedule:** The Admin is allowed to add the Schedule for the course semester wise in the form of an .jpg

- **Add Booklet**: The Admin adds the booklet limited to a pdf file only.

- **Add Test Solutions**: The Admin adds the test solutions limited to a pdf file only.

- **Add Vide Links**: The Admin adds the video links which is a URL.

- **Add Weekly Marks**: The Admin adds weekly marks; weekly marks are not subjecting wise and out of 25.

- **Add PT1/PT2**: The Admin is responsible to add the marks for PT1 and PT2 which are subject wise out of 25.

Student:
- **Student Login:** The Student is allowed to login into the App with password sent to his/her email Id and is remembered once logged In.
- **View Timetable**: The student can check timetable limited to only his/her course and semester, it's a Image and can be pinch zoomed.

- **View Schedule**: The student can check Schedule limited to only his/her course and semester, it's a Image and can be pinch zoomed.

- **View Booklet**: The Student can see a list of the booklets limited to his/her course and semester which are viewed by default by Google docs.

- **View Test Solutions**: The Student can see a list of the test solutions limited to his/her course and semester which are viewed by default by Google docs.

- **View Video Links**: The Student can checkout video links which are directed to the dedicated web link.

- **View Weekly Marks**: The Student can see his weekly marks and the marks are displayed as a Bar Report.

- **View PT1/PT2**: The Student can see his marks in the form of 2 reports namely Line Chart and Pie Chart.

    - Line Chart is divided into 3 fragments(Highest , Average and Students Marks) to help the student with his progress and rank
    - Pie Chart shows only the student's marks.

- **University Link**: The link is redirected to the Web.

Advantages:
- The Student does not have to go personally to college office for the enquiry.
- The Student has to Login and then the portal is Available to him keeping the data secure.
- The application enables the students to be updated with college cultural activities.
- If application saves time for the student as well as teaching and non-teaching staffs.
- The password is generated by the system.

3. Secure Online Auction System

Online auction however is a different business model where the items are sold through price bidding. Usually bidding have start price and ending time. Potential buyers in auction and the winner is the one who bids the item for highest price. We treat the fraud detection with a binary classification. For buying product online user have to provide his personal details like email address, license number, PAN number etc. Only the valid user will have authority to bid. This prevents various frauds according in online shopping.

Modules

Customer Module:

- Customer register: customer will be provided with a personal account through registration
- Customer Login: Login to the system with valid username and password.
- Profile Verification: The customers profile verified by the admin for the auction bid participation.
- Auction Products: Only verified customer can able to view auction product gallery, bidding for product and buy product.

Seller Module: The seller module includes different sellers who wish to sell their products. The seller needs to be approved by administrator after a seller submits his registration. A seller can add or delete or modify information about different items. The different functionalities for seller are:

- Can add a new a product
- Can delete a product
- Can place new offers to the product
- Can modify information related to the product such as price, basic information

Admin Module: The administrative module includes an admin who acts as an intermediator between seller and the customer.

- Admin Login: Login with authorized username and passwords.
- Verify Customers & Sellers: The Administrator verifies new users when the online auctioning also approve authorized seller after registration.
- Delete Seller: If the admin feels all the products from particular seller mostly are not trusted he can also remove the seller and his related products.
- Block Fraud Customer: Administrator can delete an account when any of the user leave the auctioning organization and permanently blocks the customer if fraud.

Complaint Filing

Buyers can file complaints against fraudulent sellers. The administrator views the various types of complaints and takes the final decision about it.

Advantages:

- Only authorized and verified customer can participate in auction.

- Fraud customer or seller gets detect in early stages and measure to prevent it.
- Authenticate legitimate users can buy the product online very efficiently and securely with the help of this system
- The products for auction does not need any physical location
- The bidder can participate in auction from anywhere at any time through online auction.

4. College Admission Predictor

This project Engineering Admission Predictor System is web based application in which students can register with their personal as well as marks details for prediction the admission in colleges and the administrator can allot the seats for the students. Administrator can add the college details and he batch details. Using this software, the entrance seat allotment became easier and can be implemented using system. The main advantage of the project is the computerization of the entrance seat allotment process. Administrator has the power for the allotment. He can add the allotted seats into a file and the details are saved into the system. The total time for the entrance allotment became lesser and the allotment process became faster.

Features:

It helps students to get the list of colleges to which they can apply as the system shortlists the colleges by comparing the student's marks and college's cut off.

Admin manages all the system related task such as adding college details, specifying cut-off details, managing college details, viewing student's details and viewing feedback from registered students.

Student can register themselves using web portal by entering their personal as well as marks details. Once registration is successful, they can login and view colleges allotted based on their marks.

❖ Modules:

The system comprises of 2 major modules with their sub-modules as follows:

1. **Admin:**
   a. **Add College:** Provide details for college like name, address, streams provided etc.
   b. **Add Cut Off:** Select College from database and provide cut off for previous years.
   c. **Manage / View Colleges:** Update details for college and delete them if require.
   d. **View Students:** View list of students registered into the system.
   e. **View Feedback:** View feedback sent by user (student).

2. **Student:**
   a. **Register**: Student will register themselves to the system by providing name, email ID, marks etc.
   b. **View College:** Student will be provided an option to show colleges near him and will show all the colleges based on his score.
   c. **View Profile:** Can view their own profile details.
   - **Feedback:** Student can send the feedback to notify the admin about the system.

❖ **Advantages:**

- It helps student for making decision for choosing a right college.
- Here the chance of occurrence of error is less when compared with the existing system.
- It is fast, efficient and reliable
- Avoids data redundancy and inconsistency
- Very user-friendly
- Easy accessibility of data
- Number of personnel required is considerably less
- Provides more security and integrity to data.

5. CRM for Internet Service Provider

The main idea is to implement an online system for managing the internet customers and complaint system for customers for raising complaints on the issues related to ISP provider and provide best customer care service for users using this application. There are many Internet security providers in a country that will provide internet services for users on different packages. Basically ISP works on three connections, Dial Up using telephone service, Broad band and wireless connections.

Features:

- Admin manages the whole system by performing task such as adding/viewing/editing/deleting employee details.
- System allows admin to add customer details and predict the internet plans based on their business type, region or age.
- Internet plan expiry dates of each customer will be displayed to admin if the plan is expiring in 5 days.
- All the complaint details will be displayed to the admin as well as employee to enter the complaint resolution.
- Employee can login using valid id and password which is provided by the admin.
- After login, employee can view all the unsolved complaints received from the customers.
- After resolving the complaint, employee can update the provided resolution and close the complaint.
- Once the complaint is closed, an email will be sent to customer will resolution details.
- After receiving the mail, customer can view the resolution and can rate accordingly.
- Admin can view the report of complaint resolution provided by the employee. Report will be displayed in the form of pie chart.

❖ Modules:

The system comprises of 3 major modules with their sub-modules as follows:

1. **Admin:**
   a. **Login:** Admin need to login first to access below given modules.
   b. **Add/View/Edit/Delete Employee:** Can register new employee into the system and also can view/edit/delete the added employee details.
   c. **Add/View/Edit/Delete Customer:** Can register new customer into the system and also can view/edit/delete the added customer details. Also expiry date of plan is displayed.
   d. **View Complaints:** Can view complaints received from the registered customers.
   e. **View Employee Report:** Admin can view a graphical representation of employee's resolution on complaint based on customers rating.
2. **Employee:**
   a. **Login:** Employee need to login using valid credentials provided by the admin.

b. View and Solve Complaint: All the unsolved complaints will be displayed to employee after login. Employees can update the complaint by mentioning the provided resolution on customer's complaint and can close it. Once the complaint is close, an email will be sent to the customer with resolution details.

3. **Customer:**

a. View Email: Customer will receive an email regarding their complaint resolution. Here, customer can rate the resolution provided to them. Rating can be done between 1 as minimum and 5 as maximum.

❖ **Advantages:**

- It overcomes all the problems of existing system
- System is easy to understand and user friendly.
- The system is purely based on prediction which predicts an internet plan for the customer.
- Admin can easily view employee report based on the resolution provided on the complaint.
- Reports will be graphically represented in the form of pie chart.

6. ERP on College Management System

ERP School/college/university Management Module which is used by Schools as well as Colleges to manage their daily activities which include the management of Employees, Students, Books and Library Records, Parents details, Assignments, Admission Process, Results and Reports, Exams, Events, Attendance, Timetable, Fees and Other Reports. It provides one-point access to manage these wide range of activities both effectively and efficiently.

- The system will be used by four people, which are Admin, Teacher, Librarian and Student.
- Admin can login using valid credentials and perform various task such as Adding a Teacher, Student and Librarian and also can view them.
- Admin can also add Time Table and Event details. System allows admin to view book request received from librarian.
- Teacher can login and perform various task such as add assignment, mark attendance, upload result and view event.
- Librarian can login and perform task such as adding a single or multiple books, view added books, request a book, issue a book to students, return issued book from student and view event.
- Student can access the system by providing valid credentials access modules such as viewing their own profile, view books, view time-table, assignments, result, attendance and event.
- Super admin is the root node who adds the colleges into the system with their details. Also can view/delete a college from the system.
- Proposed system is easy to understand and user friendly too.
- In that system admin who handle the data.
- Admin can take information regarding fee detail.

Managing a school, university, college or any educational institution without a perfect software solution in the present times is painful, same in the case of any enterprises or business. Hence an appropriate solution is required which can ensure the smooth functioning of the organization as a whole, and with ERP college Management Module, this problem can simply be solved

- ❖ Modules: The system comprises of 4 major modules with their sub-modules as follows:
  1. **Admin:**
     a. **Login:** Admin can login his personal account.
     b. **Add/View Student:** Admin add student detail into a system.
     c. **Add/View Teacher:** Admin add Teacher detail into a system

  d. **Add/View Librarian:** Admin add librarian detail into a system

  e. **Add Time-Table:** Admin set and add time table.

  f. **Fee Paid/Unpaid:** Admin enter fee detail into a system.

  g. **Add Event:** Admin add event detail into a system.

  h. **View/Delete Book Request:** Admin can view and delete book request from database.

  i. **View Books:** Admin can see all the books detail from database.

2. **Teacher:**

  a. **Login:** Teacher can login in his personal account.

  b. **Add Assignment:** Teacher can add assignment detail for the students.

  c. **Add Attendance:** Teacher can add attendance detail into a database.

  d. **Add Result:** Student can add result detail.

  e. **View Event:** Teacher can view event detail from database.

3. **Librarian:**

  a. **Login:** Librarian can login in his personal account.

  b. **Add Books:** Librarian can add books into database for student use.

  c. **Request a Book:** View student request for a book.

  d. **Issue a Book:** View detail of all issue books.

  e. **Return a Book:** view detail of all return book.

  f. **View Event:** Librarian can view all the events.

4. **Student:**

  a. **Login:** Student can login his personal account.

  b. **View Profile:** Student can see his profile.

  c. **View Books:** Student can view book added by librarian.

  d. **View Time-Table:** Student can view all timetable detail.

  e. **View Assignment**: Student can view all assignment detail added by teacher.

  f. **View Result:** Student can view result.

  g. **View Attendance:** Student can view attendance.

  h. **View Event:** Student can view all event detail.

❖ **Advantages:**

- This system is very easy to understand and user friendly.
- Teacher, Student, Librarian are connected with each other on one system.
- This system is saving the time for student and teacher too.
- In this system user can connect any time whenever he/she wants.
- This system is secure.

7. Automated College Timetable Generator

Most colleges have a number of different courses and each course has a number of subjects. Now there are limited faculties, each faculty teaching more than one subjects. So now the time table needed to schedule the faculty at provided time slots in such a way that their timings do not overlap and the time table schedule makes best use of all faculty subject demands. We use a genetic algorithm for this purpose. In our Timetable Generation algorithm we propose to utilize a timetable object. This object comprises of Classroom objects and the timetable for them likewise a fitness score for the timetable. Fitness score relates to the quantity of crashes the timetable has regarding alternate calendars for different classes. Classroom object comprises of week objects. Week objects comprise of Days, Days comprises of Timeslots. Timeslot has an address in which a subject, student gathering going to the address and educator showing the subject is related. Also, further on discussing the imperatives. We have utilized composite configuration design, which make it well extendable to include or uproot as numerous obligations. In every obligation class the condition as determined in our inquiry is now checked between two timetable objects. On the off chance that condition is fulfilled i.e. there is a crash is available then the score is augmented by one.

Modules & Description

There are 5 Modules in this project as follows:

1. **Course Details**
2. **Department Details**
3. **Staff Details**
4. **Time Table Allocation Details**
5. **Subject Details**

Description:

1. **Course:**
   - In this module both the entry and view of the course details can be done. If the entry should be done, then the details will be checked. After that the details will be added in the database and a message will be displayed to confirm the entry.

2. **Department:**
   - If the Department details entered then the Id of the corresponding Department must be entered, then the entered Id will be checked against the database. If the match is found, then the Department details of the Corresponding Department will be shown in that module, Else an error message will be displayed.

3. **Staff Detail:**
   - In this module both the entry and view of the staff Details can be done. If the entry should be done, then the details must be entered and checked for duplicate. Then the details will be added in the database and a message will be displayed to confirm the entry.

4. **Time Table Allocation:**
   - In the Time Table Allocation Details the staff, subject of the Corresponding staff will be entered, then the entered staff Name will be checked against the database. If the match is found, then the Time Table Allocation details of the corresponding staff will be generated and stored in database, Else an error message will be displayed.

5. **Subject Details:**
   - The subject details master includes subject name, id and the staff handling the subject will be entered and stored in database. In time table generation the details will be retrieved and used as per the requirement.

Advantages:

- Faculty did not need to worry for time clashes.
- Authority now does not need to perform permutation and combination.
- Authority can concentrate on other things rather than wasting their time on preparing Time-Table.

8. Online Shopping Portal and Product Recommendation

This project helps the users in curing its disease by giving the list of fruits and herbs that the user should consume in order to get rid of its disease. The main purpose of this project is to help the user to easily search for herbs and fruits that will be good for the health of the user depending on any health issue or disease that he/she is suffering from. This system helps the user to reduce its searching time to a great extent by allowing the user to enter its health problem and search accordingly. The admin can add fruits and herbs to the system and its information. This system also allows the user to view the selected fruit or the herb's description which describes how the fruit or the herb will help to improve the user's health. This system also allows the user to place order which will add the items to the user's cart and make payment for the same. The system also includes a module in which the user can search for the hospitals depending on the name of the disease that it enters. Thus, this system helps to cure the user's disease to a great extent. System can recommended some product to the user. If different user buy other product then this product should recommended to other active user.

❖ **Advantages:**

- The system allows placing order for more than one item.
- The system also helps to search for the hospitals available depending on the disease entered by the user.
- This system reduces the search time to a great extent.
- System also recommends products to the user.

9. Automated Teacher Evaluation System

Automated teacher evaluation system can rate their faculty on basis of questions provided by administration and also student can give their comment and feedback to that particular faculty. In admin side admin can add or delete faculty and student. Admin can add the list of questions to decide the performance of faculty. Admin also give rating to the faculty according to the question list and performance. Faculty can view their result based on student, co-teachers and admin rating. Faculty can view any comment or feedback given by their students. Faculty can give rating to the co-teacher's based on question provided by administration. Teaching performance evaluation is a necessary step in ensuring good instruction. Traditionally teaching performance evaluation is used as a tool to apprise faculty on how they are doing their job. Performance is defined as a set of outcomes produce during a certain period of time, and does not refer to the traits, personal characteristics or competencies of the performer. Faculty's evaluation is widely understood to the most effective tool to improve the quality of instruction in colleges. Timely and accurate information is useful in virtually every stage of the decision-making process. Problem are identified when information reveals that some aspect of performance can be place in the hands of decision makers.

Features: The system comprises of 3 major modules with their sub-modules as follows:

Administration Module:

- **Login:**
  Admin login to the system with valid username and password.
- **Student:**
  Admin keeps all the important information of students and perform following Functions
  1) Add Student: Admin can add new student record to the system with their valid personal details.
  2) Update Student: Admin can update the existing personal details of students.
  3) Delete Student: Admin have authority to remove data of particular student from system.
- **Faculty:**
  Admin keeps all the important information of students and perform following Functions
  1) Add Faculty: Admin can add new Faculty to the system with their valid   personal details.
  2) Update Faculty: Admin can update the record of personal details of faculty.
  3) Delete Faculty: Admin have authority to remove data of particular Faculty from system.
- **Question:**
  The list of questions to decide the performance of faculty inserted by admin.
- **Rating:**
  Admin also give rating to the faculty according to the question list and performance.
- **Report:**
  The performance reports for individual faculty can be generated and print only by admin.

Student Module:

- **Login:**
  Student login to the system with valid username and password provided by admin.
- **Rating:**
  Student can give rating to the faculty basis on question provided by administration.
- **Comment/Feedback:**
  Student can post comment for their faculty.

Faculty Module:

- **Login:**
  Teacher login to the system with valid username and password provided by admin.
- **Performance Result:**
  Faculty can view their result based on student, co-teachers and admin rating.
- **View Comment/Feedback:**
  Faculty can view any comment or feedback given by their students.
- **Rating:**
  Faculty can give rating to the Co-teachers basis on question provided by administration.

Advantages of Project

- This project is very simple and user friendly.
- User can easily access this system.
- User can directly connect to the faculty.

10. Online Food Ordering System

The main objective of online food ordering system is to automate the existing manual system with the help of advance computerized software so, that valuable data can be stored for longer period with easy accessing and manipulation of the same. The registered user can access the account with valid credentials. User can surf the food items according to categories, Cart and online payment options are available to user. User can track their orders with the food details. In Online Food Ordering System Admin can handle the functionalities like add new food items, edit/delete food items, Enable/Disable the food items according to season and availability. Admin have authority to view order details and update the delivery status of food. The payment transaction and user details are also viewable to admin.

Admin:

- Add Food Items: Admin can add food items details like name, Photo, Description/ Ingredients, Price, Category etc.

- View / Edit (Price, Enable/Disable) / Delete Items: Admin can view, edit the food items details as well as Enable/Disable food items according to season or availability.

- View Orders: Admin can track live orders and Status Update for particular food delivery.

- View Transactions: View previous transaction by date search and total amount at end.

- View Users: Admin can view the users' details which are given during registration.

User:

- Register: User have to register with essential details for food ordering system.

- Login: User have to login with their credentials to access food ordering system.

- Menu List: Different food items with respective categories viewable to user.

- Item Details: User can view food items details and buy the product by doing online payment.

- View Cart: User can view their cart details, delete food items from cart, update quantity etc.

- View Orders and Status: User can keep track of their orders with delivery status.

- **Advantages:**

  - Customer can check the food items details with prices efficiently.
  - Saves a lot of time of customers because of online transactions.
  - Customer can keep track of their orders too.

11. On Road Vehicle Breakdown Assistance

This vehicle management system is fully customized desktop application where company staff can view each customer order and give a solution to those vehicle problems. The locating system allows you to search Mechanics from different locations. Admin handles and can access the user details as well as the Mechanic details. Admin has the access to allow/block and view the mechanics. This online mechanic locator reduces your work and can easily find the mechanics from various areas. Reduces your time and cost.

Modules and their Description

The system comprises of 3 major modules with their sub-modules as follows:

Admin

    a. **Login:** Admin need to login with valid login credentials.

    b. **View Mechanics:** Admin can view the registered mechanics with their details and has the access to allow or block a mechanics.

    c. **View Users:** Admin can view all the registered user details.

    d. **View Feedback:** Admin can view all the feedback given by the user and mechanic.

Mechanic:

    a. **Register:** Mechanics can register with all their information.

    b. **Login:** Registered mechanics will be provided access to Login only if the Admin will allow or block.

    c. **View Request:** Mechanics can view the request which is sent by the user.

    d. **Feedback:** Mechanics can provide their own feedback.

User:

    a. **Register:** User can register with all their details.

    b. **Login:** Registered user can Login with their credentials.

    c. **Search Mechanics:** User can search for local mechanics on the basis of their locations.

    d. **Send Request:** On selection of the mechanics, the user can send the request to the respective mechanic.

    e. **Feedback:** User can give their feedback accordingly.

❖ **Advantages**

    o Secure registration of user's and mechanics.

o Easy access to the data.

o The new system is more user-friendly, reliable and flexible.

o Reduced manual work.

o Search mechanics based on different locations.

12. Online Faculty Staff Directory for Multi University

Online faculty directory enables user to effortlessly view college/university faculty details. Student can simply view different college/university faculty details anywhere required at any time as this application is handy. This system is built with effective graphical user interface which enables user openness. User can search faculty details and view their particular details such as name, department, courses, area of expertise, and professional interest. This system reduced time and cost of user. Here there are two entities who will access this system i.e. admin and student. Admin is authorized to add and manage all the faculty details. User doesn't require any registration or login to access this system. User can directly search for faculty and view their details. Data in database are maintained securely without any maintenance cost.

❖ Modules and their Description

The system comprises of 2 major modules with their sub-modules as follows:

1. **Admin**
    a. **Add Faculty:** Admin can register new faculty with their details.
    b. **Manage Faculty:** All the added faculty details can be Viewed / Updated / Deleted by the admin.
2. **User**
    a. **Faculty List:** All the added faculty details will be displayed to the user.
    b. **Refine / Search By:** User can search a specific faculty details by Name, Department, Courses Teach, Area of Expertise, Professional Interest.

❖ **Advantages**

o Faculty Profiling and managing.
o Easy and Handy faculty details.
o Time and cost saving.
o Robust and secure system.
o Easy access to the data.
o The new system is more user-friendly, reliable and flexible.
o Reduced manual work.

13. Print Management System

Printer Software creates printing efficiency which in turn reduce cost and increase productivity. Print management, print monitor and adjustable security settings to prevent waste and unauthorized use are key features of our software. We have provided our solution to thousands of businesses and educational institutions. Our solutions have in turn improved work control, reduced costs and increased efficiency. Proposed system is accessed by three entities namely, Admin, User and Release Station. Admin need to login with their valid login credentials first in order to access the web application. After successful login, admin can access all the modules and perform/manage each task accurately. Admin can perform task such as adding new user and creating login credentials for them. Admin can view or delete a registered user. System allows admin to view printing job list and approve or disapprove printing job. User can login into the system and perform task such as upload document for printing, and send printing request, view printing jobs, printing status and recharge their account wallet. A person at release station prints the desired requested document. Application handles load balancing on every printer on the network.

Modules and their Description: The system comprises of 3 major modules with their sub-modules as follows:

1. **User**
    - **Login:** User need to login using valid id and password in order to access the system.
    - **Web Print:** Upload Document (No. of pages, copies, and calculate total number of pages) and add printing job.
    - **Jobs Pending Release:** User can view all users' uploaded documents as well as number of pages, documents and timing it may take.
    - **Printer status:** As per load balancing mechanism, printing job is divided between printers.
    - **Recharge:** User can recharge his account wallet.

2. **Admin**
    - **Login:** Admin need to login using valid login credentials.
    - **Add User:** Add user details with his personal details and can sent user id and password to his email id
    - **View User:** Can view registered user details.
    - **Delete User:** Can delete registered user if needed.
    - **Print approve:** he can approve for printing based on this timing will be changed automatically and load balancing. Print amount will be calculated and deducted from student's wallet.

3. **Release Station**

- **Print/Delete Document:** User can login with their credentials and print the document or delete it.

Advantages of project

- Easy To Install and Use

- Printer Manager & Print Monitor

- Print Counting & Print Tracking

- Optimizing Printing workflow

- Load Balancing

- Authenticate Users

- Enables secure printing

14. eBug Tracker - Bug Tracking System Project

This defect tracking system helps to track bug. There are three modules in this tracking system, Administrator, Staff and Customer. The Administrator can login to the app and can enter the details of staff, project, view bugs send from the customers. The admin can also also assign work to staffs, view bug case flow status details, send messages to customers using this bug tracking application. The staff can login to the site using username and password. Then he/she can view the bugs assigned to them. He can directly give solution message to customers or he/she can assign the bugs to other staffs if the bug is related to them. The user may view bug case flow details with which he/she is involved. The customer registers in to the applications and login to the site using username and password. Whenever a bug is raised from his software, he sends the bug details to the administrator with print screen of the bug generated. He/she may see the bug case flow details and bug status along with remedy details at any time using the ticket number generated during new bug entry. This is how bug tracking can be done with this application.

❖ **Modules:** The system comprises of 3 major modules with their sub-modules as follows:

1. **Admin:**
   - **Staff Entry:** The staff details are username, password, category and Email Id
   - **Project Entry:** The project details are name and description.
   - **New Bugs from Customers:** The bug details are project name, error category, error details, print screen of the bug, due date to reply for the bug.
   - **Assign Bug to staff:** Bug assign details include the ticket number which is generated for the bug and other messages.
   - **View Bug case flow status details:** Case flow details include bug details, which staffs are involved in solving the bug, and the status.
   - **Send message to customers:** Message sending includes the bug solution.
2. **Staff:**
   - **Login:** The staff may login to the site using username and password.
   - **View Bug:** Then he may view the bugs assigned to them. He can directly give solution message to customers or he can assign the bugs to other staffs if the bug is related to them.
   - **Bug Flow:** The user may view bug case flow details with which he involved.
3. **Customer:**
   - **Login:** Customer registers in to the applications & login to the site using username & password.
   - **Bug:** Whenever a bug is raised from his software, he sends the bug details to the administrator with print screen of the bug generated.
   - **Flow:** He may see the bug case flow details and bug status along with remedy details at any time using the ticket number generated during new bug entry.

❖ **Advantages**

- Bugs can be solved easily
- Can be shared to the upper department on just sending bug ticket

15. Online Paying Guest Accommodation

It has become easy to search accommodation nearby the work place. It was difficult earlier to go a place to work which was situated at long-distances and hence had to lose good opportunities, as we don't know where to stay and where unaware about a particular city. But now it has become easier to find an accommodation nearby the work place in cheap rates. In this online paying guest system, users can find a number of paying accommodation nearby work place or desired place. Even user can add his/her own desired places and get the tenant easily by just uploading picture and details of the respective place. In this system user can register to get login id and password. With login id and password user can get logged in. After logging in, user can post the paying guest post by adding details and pictures of the place. He/she can also view the interested users in his/her uploaded post. The uploaded post can be removed or deleted. User can also see for the paying accommodation and after getting the desirable place he/she can select the place he/she is interested in. After selecting the desired place, user will get the personal details of the owner, he/she can get in contact with the owner and go for further processing.

❖ **Advantages**

- It provides accurate details.
- It is time consuming
- Easy to get paying accommodation.
- Easy to rent place.

16. Exam Cell Automation

- Currently Exam cell activity mostly includes a lot of manual calculations and is mostly paper based. The project aims to bring in a centralized system that will ensure the activities in the context of an examination that can be effectively managed.
- This system allows students to enroll themselves into the system by registering their names or by sharing details to admin.
- This is done by providing their personal and all the necessary details like Name, email, examination, semester, etc.
- The provided details are then entered by admin into the system to create their hall tickets and also creates login id and password for them.
- After creating the hall ticket, the system mails the link of soft copy to every student who have registered.
- Students containing link in the mail can view and print the hall ticket and also can login into the system using login id and password to modify or update their details like Phone number, email-id, etc.
- Admin is also responsible for generation of mark sheets for every registered student.
- There will be total three to six semesters where each semester contains maximum seven subjects.
- Admin can enter the marks of every student into their respective mark sheet using the system's GUI or via Database entry.
- Every student mark sheet will be created and printed separately.
- Thus on a whole it serves as a complete automated software which handles the every tedious and complex process handled during the examination times by the exam cell of a college.

This system comprises of 6 Modules:

Description:

1. **Student Register:**
   - To register students have to just provide their Personal Details like Name, Address, Phone No, etc., and a photo, to the enroll himself into the System.
2. **Admin Login:**
   - Admin can view who has enrolled into the system, and can see all the new enrollment on his login.
3. **Send Email:**
   - After creating the hall ticket, the system mails the link of soft copy to every student who have registered.
4. **Student Login:**
   - Students can use their credentials provided by admin to login into the system
5. **View and Update Details:**
   - System allows registered students to view and modify/update the personal details like Phone number, email-id, etc.
6. **Mark sheet Generation:**
   - System allows admin to generate mark sheet of examination for every student.

Advantages

- This system allows only the registered students to login into the system which prevents unauthorized access.

- The students can view their hall ticket by just clicking on link provided by admin via e-mail.
- The students can even update their details as and when required.
- Boosts enterprise accessibility.
- Faster exam registration.
- Easy result generation.
- Improved accuracy of student data.
- Better convenience for students.

17. Periodic Census with Graphical Representation

We propose Census Measurement system which eliminates the process of personally visiting each houses and collecting data for Census Report. There will be 3 main roles in this system: Admin, User and Officer. Admin will have rights to create officers and assign them a particular area. User (Family Head) will be able to add family members and their detail like name, mobile no, email id, age, DOB, gender, marital status, etc. with this user needs to provide Official document for each and every member. Officer will be assigned a particular region, all the data filled by the user of that area will be sent to that area's officers. Officer can view documents of a particular member and check their details. If officer finds any error or correction, he can send a request to user with a note about the error and user can re-correct the area and send the request back to officer. After officer's approval, data will be stored in final table. Admin will be able to get reports with parameters like state, age, gender, education, etc.

Features:

Admin:

- Add Officers
- Manage Officers
- View Reports + Search Sort Function.

Officer:
- Login
- View new Request.
- View Corrected Request.
- Validated Members
- Reject Member / Ask for details.

User (Family Head):

- Add Family Member (with details like name, dob, sex, email, phone, Education, Occupation, Address, Area, City, State) specify if any other,
- Upload Identification Card / Birth Certificate / Document for each Member
- View correction request.
- View Request status.

Advantages of the proposed project:-
- Main advantage of this system is that officers don't need to visit house by house and collect data.
- If there is any error or typo in data officer can ask for correction of it.
- Census need not be carried out every 10 years, user can update details where ever it changes.

18. E-Banking Log System

The E-Banking Log system features uses user behavior and location scanning to check for unusual patterns. These patterns include user characteristics such as user spending patterns as well as usual user geographic locations to verify his identity. If any unusual pattern is detected, the system requires re-verification. The system analyses user credit card data for various characteristics. These characteristics include user country, usual spending procedures. Based upon previous data of that user the system recognizes where Sequential Pattern Mining Algorithm will be applied, where system will mine the previous transaction, and check if the current transaction exceeds the amount or system feels that the user is not official user then system will block him, or if system finds this user as Official then it will again send an OTP, if 2 times OTP entered is wrong then too account is blocked, and it can be unlocked by Admin. Checking a website if it's authentic or not, just provide the site URL and system will scan if its blacklisted, is it fake, etc. Sometimes E-Banking websites sends user different URL like site.sbi.com, site3.sbi.com, etc. so hackers create same site like sitesbi.com *without '.', so this can scan these kind of website.

Features:

- **Admin:**
  - **Add User:** Add account details of user like account no, name, email etc. and login details will be sent to his email id
  - **View User Details:** System allows admin to view registered user details.
  - **View Feedback:** Admin can view all the feedbacks from the registered users.
  - **Unblock accounts:** Admin or respective authority is allowed to unblock the users account on request.
- **User:**
  - **Login:** User need to login with the credentials received on email, with that an OTP will be sent to secure the system, OTP will only last for 2 minutes.
  - **New Transaction:** This is the module where Sequential Pattern Mining Algorithm will be applied, where system will mine the previous transaction, and check if the current transaction exceeds the amount or system feels that the user is not official user then system will block him, or if system finds this user as Official then it will again send an OTP, if 2 times OTP entered is wrong then too account is blocked, and it can be unlocked by Admin.
  - **View Transaction:** Search a particular time spawn, and get all the transaction in that spawn.

- **Check Website:** Check the site if its authentic or not, just provide the site URL and system will scan if its blacklisted, is it fake, etc. Sometimes E-Banking websites sends user different URL like site.sbi.com, site3.sbi.com, etc. so hackers create same site like sitesbi.com *without '.', so this can scan these kind of website.

- **View Balance:** All the registered user can view their respective balance in their account.

- **Transfer Money:** User can transfer their money to any other account. Same as new transaction by checking all stuffs.

Advantages of the Proposed Project:

- The system stores previous transaction patterns for each user.

- Based upon the user spending ability and even country, it calculates user's characteristics.

- More than 20 -30 % deviation of user's transaction (spending history and operating country) is considered as an invalid attempt and system takes action.

- User can make online payment securely.

- Data mining algorithm used in this system provides better performance as compared to other traditional classifications algorithms.

- With the help of this system user can also purchase products online without any hesitation.

19. Industrial Tour Package Planning

- **"Industry Visit Tour System"** is a specific web based reservation system designed to make it easier for people or college to book industrial tour packages online.

- Admin access the modules such as adding subjects, places, package details.

- System allows admin to view all the booking details as well as the user details.

- User need to register in order to login and access the inner modules.

- User may login and view various industrial tour and travel destinations with the package details and pricing for each person.

- If user wants to take multiple people on tour, then he/she needs to specify the no. of people for the tour.

- Based on no. of people, the system will automatically calculate the cost which is payable by the user using online mode.

- Each one's amenities type is shown in the system with image and respective costing.

- The user may then pay via credit card

- After booking is successful, user receives an email notifying the booking details.

- User can view all their previous and current booking details.

Modules: The system comprises of 2 major modules with its sub-modules as follows:

- o **Admin**
    - o **Login:** Admin need to login first in order to manage the system.
    - o **Add Subject:** Can add subjects such as IT, Botany, Art, Hotel Management, etc., which is educational, related.
    - o **Add Place:** Admin can add all the industrial related places such as Infosys, L&T, Wipro, etc.
    - o **Add / View Package Details:** Admin defines a package detail for each person for industry visit. Also can view all the added package details.
    - o **View Booking Details:** System allows admin to view booking details with the name of the bookie and its details.
    - o **View User Details:** All the registered users will be displayed here with their details.
- o **User:**
    - o **Registration / Login:** New user needs to register first to access the system by filling up the basic registration details.
    - o **View Places:** User can see the list of added places with its details. User can search industry according to subjects or places.

- o **View Packages:** Can view all the packages, which are added by the admin with their details.

- o **Select a Package:** Here, the user selects desired packages as per entered destination location.

- o **Payment:** Once the user selects the package, he/she can proceed with payment.

- o **Email Notification:** Once the payment is successful, user will receive a notification via email.

Advantages:

- This web application has made it possible to book a trip online and to compare prices so that user can be sure that they are getting a good deal.

- It is easy to use, robust, secured Website

- Ease to maintain both System as well as Database.

- Many selection and filter tools allows customer to comparison shop.

- This System has integration of the most popular payment gateways, as well as can process credit card payments.

20. Intelligent Tourist System

- There has been a huge development in information technology recently. In addition, GIS has been commonly used in different fields such as tourism activities enabling people from different countries and cultures to interact with each other.
- A network is a set of linear features that are interconnected in GIS. Common examples of networks include highways, railways, city streets, rivers, transportation routes (e.g., transit, school buses, garbage collection, and mail delivery), and utility distribution systems (e.g., electricity, telephone, water supply, and sewage). Collectively, these networks form the infrastructure of modern society.
- Tourists visiting a new city are provided with city map pamphlets that need to be viewed by the tourists to find the fine printed locations to visit.
- Well it doesn't consist of entire details of those locations or how to reach the location as well as other emergency amenities like hospitals, institutes, bus stops etc.
- The Google and other navigation systems are internet based systems that do not work outside internet connections.
- So here we propose an Intelligent Tourist system that will help tourists and people shifting to new cities to locate and find amenities in that particular city.

Modules and their Description

1. **User Registration/Login**
   a. **Questionnaire Tab**
   b. **Manual Tab**
2. **Admin Login**
   a. **Enter Places**
   b. **Edit/Update Questionnaire**

❖ **User Section:**
1. A login page will appear initially and the user has to login in order to continue.
2. If the user is new he/she will have to fill the registration form (username, password, email, first name, last name, etc.) current location of the user is obtained by the use of gps.
3. These details will be submitted to an online database.
4. After logging in, the user will get a screen with 2 tabs.
   1. **Tab 1:**
      ▪ it will contain a set of questionnaire which the user has to reply using radio buttons.
      ▪ Based on the answer provided by the user, an intelligent tree algorithm will run and 1-3 best results will be provided from the online database.
      ▪ Clicking on each result will provide the user with the description of spots/locations along with the pictures. The user will also have the option to view the exact location of the spot on Google map
   2. **Tab 2:**

- This section allows user to make a manual search for various tourist locations by country, city area, name of place.

❖ **Admin Dashboard:**
1. Admin can operate the system from a web application through his browser.
2. The system also consists of an admin dashboard where admin can login and enter places into the database with images, information, type of location and position on maps.
3. Also admin can add/edit the questionnaire for the user to fill.

❖ **Advantages**

- This system solves all problems of the client just by asking some questions. And it provides three best options that fit into user's requirements along with the place details and facilities.

- It saves their money and time in finding and consulting a travel agency where they charge more.

21. Online Book Reselling

This project is like an e- bookstore website where books can be bought from the comfort of home through the Internet.   An online bookstore is a virtual store on the Internet where customers can browse the catalog and select books of interest. User can select many books and those books stored in cart. At checkout time, the items in the shopping cart will be presented as an order. At that time, more information will be needed to complete the transaction. Usually, the customer will be asked to fill the basic details or select a billing address, a shipping address, a shipping option, and payment information such as credit card number.

Modules:

1. **User:**
   a. **Registration:** User need to register first with their basic registration details and nee to create a valid login id and password.
   b. **Login:** Using valid login credentials, user need to login into the system in order to access the system.
   c. **View Books:** Once user is logged into the, he/she may view all the added books with their details.
   d. **Buy Books:** User can surf various book of their choice and buy them.
   e. **Add Books:** System allows user to sell their books online buy added the book name and its details.
   f. **Upload Books:** User need to upload a book if he/she wants to sell a book.
   g. **My Orders:** All the purchase history of user will be displayed with details.
   h. **View Buyer:** If any buyer is interested in buying a book or anyone buys a book from the user then buyer's details will be displayed.

2. **Admin:**
   a. **Login:** Using valid login credentials, admin need to login into the system in order to access the system.
   b. **View Books:** Admin can view all the added books online with their details.
   c. **View Transaction:** System allows admin to view all the transaction details of buying and selling a book.
   d. **View User:** All the registered user details will be displayed to the admin

Advantages:

- Customers can get their book delivered instead of actually going and buying the book.
- Feasibility of making payment online itself.
- Managing of inventory of the books for user becomes easier as customers are not visiting and ordering it online.

- This system saves both time and travelling cost of customers.
- User can get to know different kinds of books that they were unaware of by just searching in the system using keywords.

22. Online Medicine Shopping Website

To provide computerized data storage facility. We can search easily any record. The new system requires less time for completion of any work. All the stock of medicine is update automatically in the new system. The system is user friendly and anyone having computer knowledge can handle it easily. Suitability for computerized data entry. Maintaining stock, Supplier information, Customer information & bill information are easy.

Modules

1. **Admin Login:** Admin need to login by providing the login credentials to access the below given admin modules.

   a. **Product Entry:**

      i. Admin can enter details about new medicine products details.

   b. **View Order:**

      i. Admin can view details about the order placed by the user.

   c. **View Users Details:**

      i. Admin can view all the registered user's details.

2. **User Login/Registration:** User can register on the system and get his online account on site.

   a. **View Products:**

      i. The products are arranged and can be viewed in categories.

   b. **Add to Cart:**

      i. Users can add multiple products to cart.

   c. **Pay using Card:**

      i. After total bill is calculated user can pay via credit card online.

   d. **View Order:**

      i. User can view details about the order placed.

ADVANTAGES

- User can view details of the medicines without going anywhere.
- It is convenient for users as this system provides accurate cost and description of the system.
- The website is flexible to be used and for e-shopping.
- User can view different categories of product of different pharma company at a single place.
- The products are delivered to the customer in his/her house so this becomes more convenient for them.

23. Online Personal Counselling System

In order to improve the facilities related to counselling process, many other virtual counselling schemes came into actuality, which provisions the students in getting essential help about the educational procedures of universities and colleges. Counselling is the process that includes different types of activities such as guiding students towards colleges and universities, supporting them to register with their courses, providing full guidance in getting the information related to their college registration process. This online counselling system even gives great support to universities and colleges through which they can totally reduce the paper usage for counselling and guiding the students towards their university courses. Basically this software includes three different modules in which universities can manage their college records, student's records as well as counselling sections.

❖ **Modules:**

The system comprises of 3 major modules with their sub-modules as follows:

1. **Admin:**
   - **Login:** Admin can login in his personal account using id and password.
   - **Add Counselor:** Admin can add a new counselor with their details and create login id and password.
   - **Add Question:** Admin can add new questions by specifying their options and the correct answer.
   - **View User:** Admin can view all information about the user.
   - **View/Edit/Delete Question:** System allows admin to view/edit/delete a question.
   - **View/Delete Counselor:** Admin can view Councilor info. In addition, can delete a counselor if required.

2. **Councilor:**
   - **Login:** Councilor can login their personal account using id and password, which is provided by the admin.
   - **View User/ Chat:** A counselor can initiate a chat with the user whenever required.
   - **View Score:** Councilor can view test scores of user.
   - **Feedback:** Councilor can give his feedback to the admin regarding the working of system.

3. **User:**
   - **Login:** User can login his account using id and password.
   - **Take a Test:** User can take test on general knowledge questions and select correct answer for the asked question.

- **View Score:** User can view their own score history to know how they scored previously.

- **View Counselor/Chat:** User can view counselor and also can chat with them if required.

- **Profile:** Counselor can view their own profile and edit/update their details like contact no., email id and age.

- **Change Password:** User can change their current password with new one whenever required.

- **Feedback:** Registered users can write a feedback message to notify the admin about the working of the system.

❖ **Advantages**

- The proposed system will save significant amount of time and effort invested by the university every year

- The System fully works as an online.

- Centralized maintain all information.

- It helps the university to dynamically add records to the database.

- Easy to Searching the information about college or university.

- Easy to managing whole counseling procedure

- This system is user friendly.

- Councilor and user can directly connect to each other.

24. E-Visa Processing

Using this system user can apply their visa online. It is key to enhancing both security and convenience. In this system user has to upload some useful document for verification purpose. Reduced and the applicant can apply for visa conveniently from any place. As a result, a new generation of e-Visa solutions has emerged, User can view their all visa process online through an e-Visa portal.

Modules:

1. **Admin**
   a. **Login:**
   b. **Add HR:** Admin will add basic details and generate his Login Credentials.
   c. **Manage HR:** Added HR details can be Viewed / Edited / Deleted.
   d. **Add Employee:** Add Basic Details and generate his Login Credentials.
   e. **Manage Employee:** Added employee details can be Viewed / Edited / Deleted.
   f. **Visa Status:** Admin will view the current Visa status and its expiry information and request for renewal.
   g. **Applicant Report:** Admin can Search Employees and refine it by location / Name and view the applicant report.
   h. **Interview Report:** Report of Employees Interview will show with its status.
   i. **Result Report:** Final Result report contains details of candidate and their result.
   j. **Onsite Report:** Admin can view onsite report/details which are entered by the employee.
   k. **Feedback:** Admin can view feedback send via employees and HR and even delete them after it's viewed.

2. **HR**
   a. **Login:** HR person need to login using their valid login credentials.
   b. **View Employees:** All the added employees will be displayed to the HR person.
   c. **New Visa Request:** Selecting the employee and adding details visa for country, dates, etc. and adding interviews dates with consultant details.
   d. **Update Visa Request:** Updating Interview details with its result and even updating final result.
   e. **Reporting:** All the visa reporting details can be viewed by the HR person.
   f. **Change Password:** HR person can change the password with new one anytime.
   g. **Feedback:** HR can send feedback directly to admin.

3. **Employee**
   a. **Login:** Employee need to login using their valid login credentials.
   b. **Onsite Details:** Employee can check the next onsite Scheduled and view details like source and destination, period etc.
   c. **Update Onsite Project:** On Regular interval employee can add details about the project and update its status.
   d. **Feedback:** Employee can send feedback directly to admin.
   e. **Change Password:** An Employee can change the password with new one anytime.

Advantages

Cost savings

Because the whole process is online, logistics are simplified and streamlined.

Time saving

For applicants and government authorities alike, time and money are wasted on clumsy and frustrating paper-based systems.

- The system has feasibility for the applicant to apply and submit the visa application through online.
- It is an automated system; the applicant can apply for the visa at any time from any place.