MINI PROJECT - II

(2021-22)

“Crystal Blues”

Project Report

Institute of Engineering & Technology

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Declaration

I/we hereby declare that the work which is being presented in the Bachelor oftechnology Project **"Crystal Blues"**, in partial fulfilment of the requirements for the award of the ***Bachelor of Technology*** in ComputerScience and Engineering and submitted to the Department of ComputerEngineering and Applications of GLA University, Mathura, is an authenticrecord of my/our own work carried under the supervision of **Mr. Neeraj Khanna sir, Department of Computer Engineering & Applications,GLA University.**

The contents of this project report, in full or in parts, have not beensubmitted to any other Institute or University for the award of any degree.

Certificate

This is to certify that the project entitled "**Crystal Blues**", carried out in Full Stack - II Lab, is a bonafide work by Biprajit Debnath ,Ayush Pandey, Chandra Priy Singh, Abhinav Sharma, Gautam Singh and is submitted in partial fulfilment of the requirements for the award of the degree Bachelor of Technology (Computer Science & Engineering).

Signature of Supervisor:
Name of Supervisor: Mr. Neeraj Khanna

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ACKNOWLEDGEMENT

Presenting the ascribed project paper report in this very simple and official form, we would like to place my deep gratitude to GLA University for providing us the instructor Mr Neeraj Khanna, our technical trainer and supervisor.

He has been helping us since Day 1 in this project. He provided us with the roadmap, the basic guidelines explaining on how to work on the project. He has been conducting regular meeting to check the progress of the project and providing us with the resources related to the project. Without his help, we wouldn't have been able to complete this project.

And at last but not the least we would like to thank our dear parents for helping us to grab this opportunity to get trained and also my colleagues who helped me find resources during the training

Thanking You

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ABSTRACT

In today's fast-changing business environment, it's extremely important to be able to respond to client needs in the most effective and timely manner. If your customers wish to see your business online and have instant access to your products or services. Online Shopping is a lifestyle e-commerce web application, which retails various jewellery products. This project allows viewing various jewellery available enables registered users to purchase desired jewellery instantly using (Instant Pay) and also can place order by using Cash on Delivery (Pay Later) option.

website, a number of Technologies must be studied and understood. These include technologies like CSS,Js and Bootstrap. This is a project with the objective to develop a basic website where a consumer is provided with a shopping cart application and also to know about the technologies used to develop such an application. This document will discuss each of the underlying technologies to create and implement an ecommerce website.

INTRODUCTION

1. Context

This Website "**Crystal Blues**" has been submitted in partial fulfilmentof the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering at GLA University, Mathura supervised by Mr. Neeraj Khanna. This project has been completed approximately two months and has been executed in modules, meetings have been organised to check the progress of the work and forinstructions and guidelines.

2. MOTIVATION

In the recent years, we have realised the significance of online shopping platforms and how it's trending online. Online shopping platforms have been great source of profit and having them at the reach of our fingertips would be an opportunity hardly anyone would afford to miss.

The motivation behind this project is to provide customers good platform to purchase products or to know about upcoming designs as there are many websites that do not provide certified ornaments on latest designs all over the world at a reasonable cost.

In the century we are living the world is progressing at a really great pace, a lot number of designs come up every single day. To keep up with the technology is also important to survive in this world of digitalisationand learning. Along with this we need to have a place to keep the resources for areas of our interest so we thought of developing a website which could provide us with virtual platform where we could keep the online-jewellery and ornaments we like. Adding to its features, some of the course will pop up into the suggestion box according to the recent search.

3. OBJECTIVE

Crystal Blue's objective is to provide best service among all jewellery website which are available at reasonable of cost. User can search how many courses has released today and enrol in the courses by just clicking on the given link. The goal of the website was to provide a way to the users to get all the courses they desire to watch at a particular location rather than randomly surfing the Internet.

4. EXISTING SYSTEM

In the present scenario, we are dealing with the manual searching of Products from thousands of other Products present in Other website. With the help of this website we are able to find a place where we can easily find the Product with the help of keywords. As this idea as already implemented here are the some snap how our application will look. As soon as the user enters the website, there will be landing page containing the name of the website and then there will be a login / signup page

.Initially there will be search bar as shown in the image below. Then on the basis of certain keywords the website will fetch the results and the.

5. SOURCES

The source of our project (including all the project work, documentationsand presentations) will is available at the following link.

https://crystalblues.netlify.app

SOFTWARE REQUIREMENT ANALYSIS

1. Problem Statement

To provide such a website where user can search jewellery all over the world which isreleased today and watch them.

2. Modules

The project is based on several modules:

2.1. Product perspective

1. User Interface: The application will have a user-friendly and menu-based interface. Following pages will be provided:
2. A login page for entering the username, the password will be provided. Access to different Screens will be based on the user.
3. There is a page displaying courses and webinars that are globally recognised.
4. There is a page for displaying information of particular course like productionand all and the link of demo videos.
5. There is a page for displaying information of the team members.
6. There is a page for displaying information menu regarding what options the userwill select .
7. There is a page for displaying search box where user can search any course.
8. There is a menu where user can sort all those course to easily extract them.
9. There is a page for displaying the results of searching courses that it is exists ornot if exits then the page will display it.

2.2. Product Functions

The website will allow access only to authorised users with specific roles (Administrator- maintain the website details, User (Viewers), Course Producers .A summary of the major functions that the website will perform:

1. Provide facility to user to search courses globally and to watch that particular enrolled course.

a. User Can see a list where all the courses and webinars that you enrolled are listedit can be again sorted as per the requirement.

b. User Can login and buy jewellery directly.

1. Administrators

- ✓ *Admin should be able to maintain the website and data.*
- ✓ *Update information about courses, production and webinars etc.*
- ✓ *Can recommend the learning path list to a user.*

2. User

- ✓ *Can find courses and details*
- ✓ *Can directly join live stream and webinars on the platform.*
- ✓ *Can login to make enrolled courses list.*

3. Production Companies

- ✓ *Can update their profile*
- ✓ *Can check and update the details of the courses and webinars.*

3. HARDWARE AND SOFTWARE REQUIREMENTS

Hardware Requirement

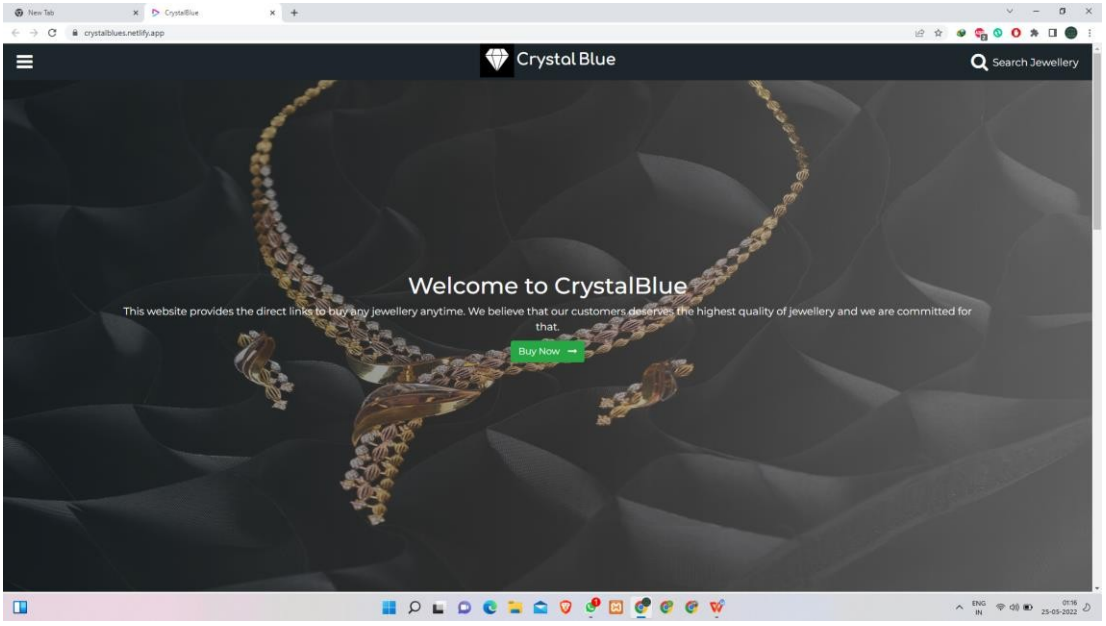
- Processor :intel i5
- Operating System :Any Operating System
- RAM : 8 GB (or higher)
- Hard disk : 256GB

Software Requirement

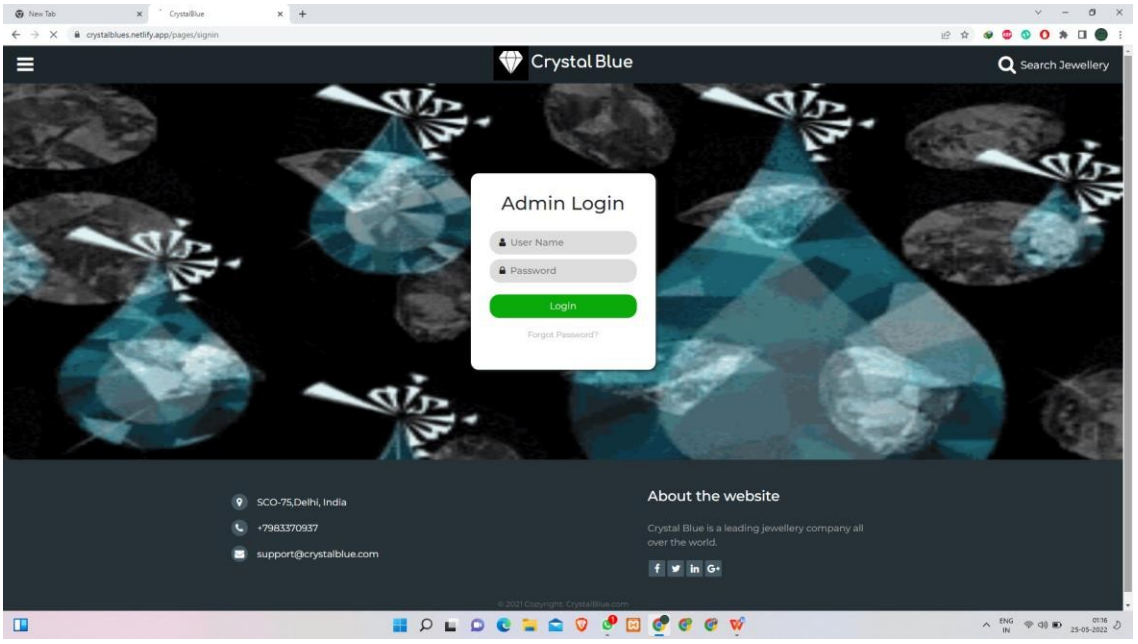
- Software used: Visual Studio
- Language used : ,Frontend
- Database: MongoDB
- User Interface Design: Website

SOFTWARE DESIGNS

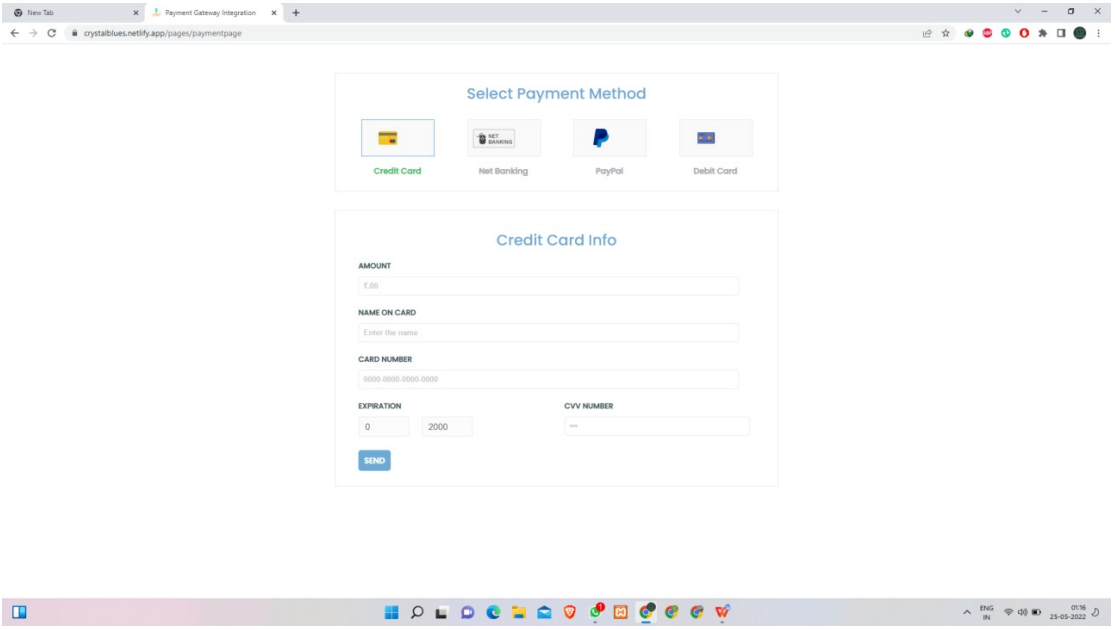
- **Main Page**



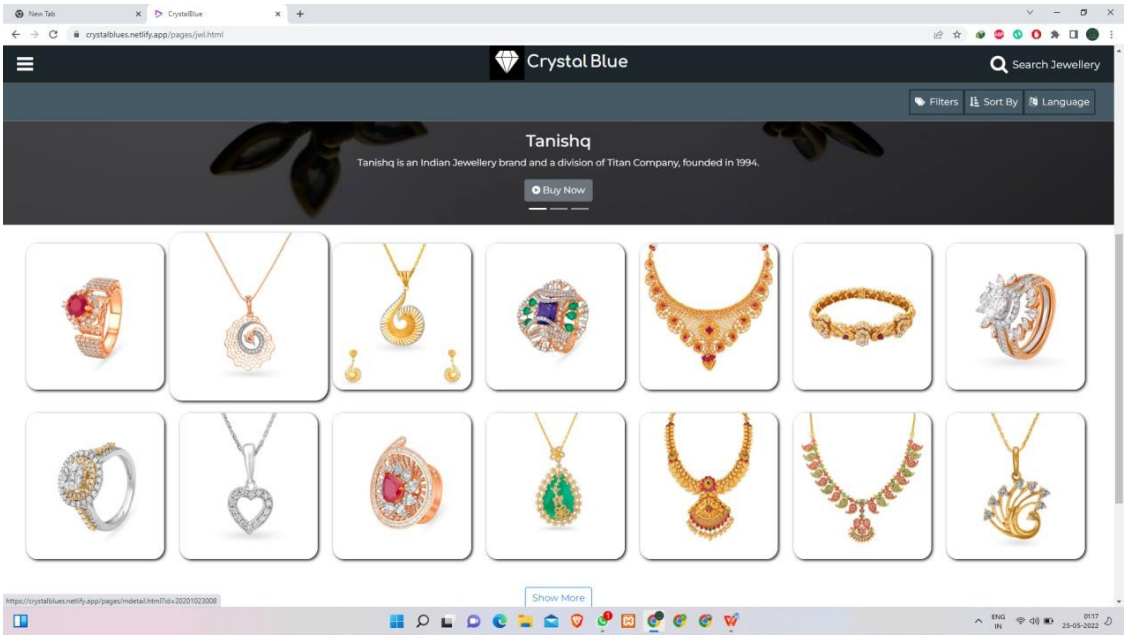
- **Login Page**



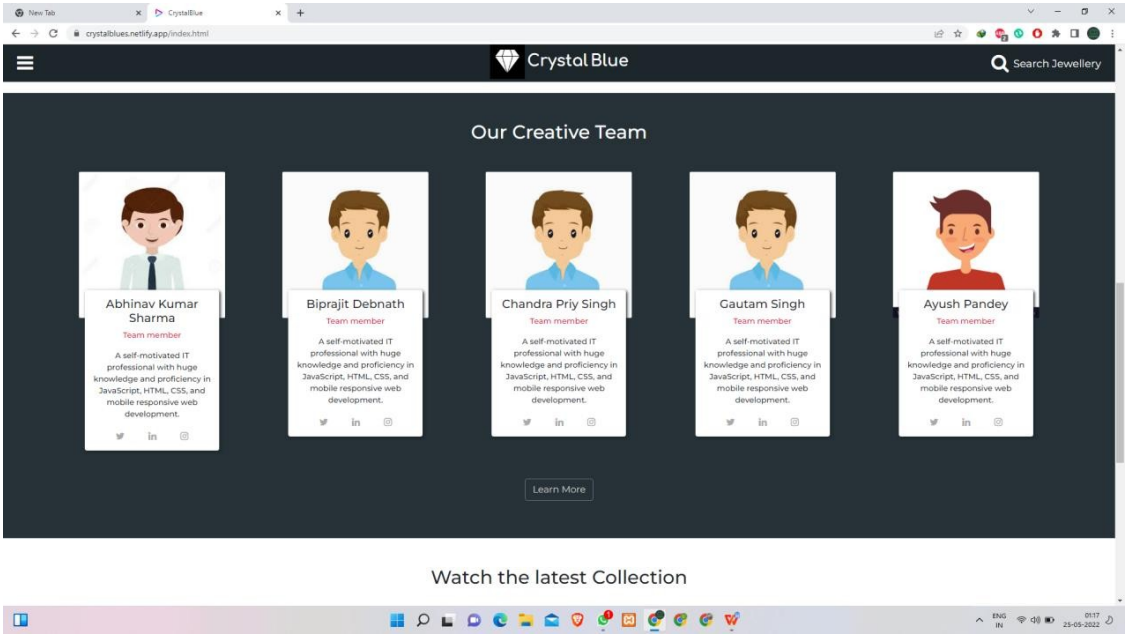
- **Payment Gateway**



- **Shopping Page**



- **Blog Page**



- **USE-CASE DIAGRAM:**

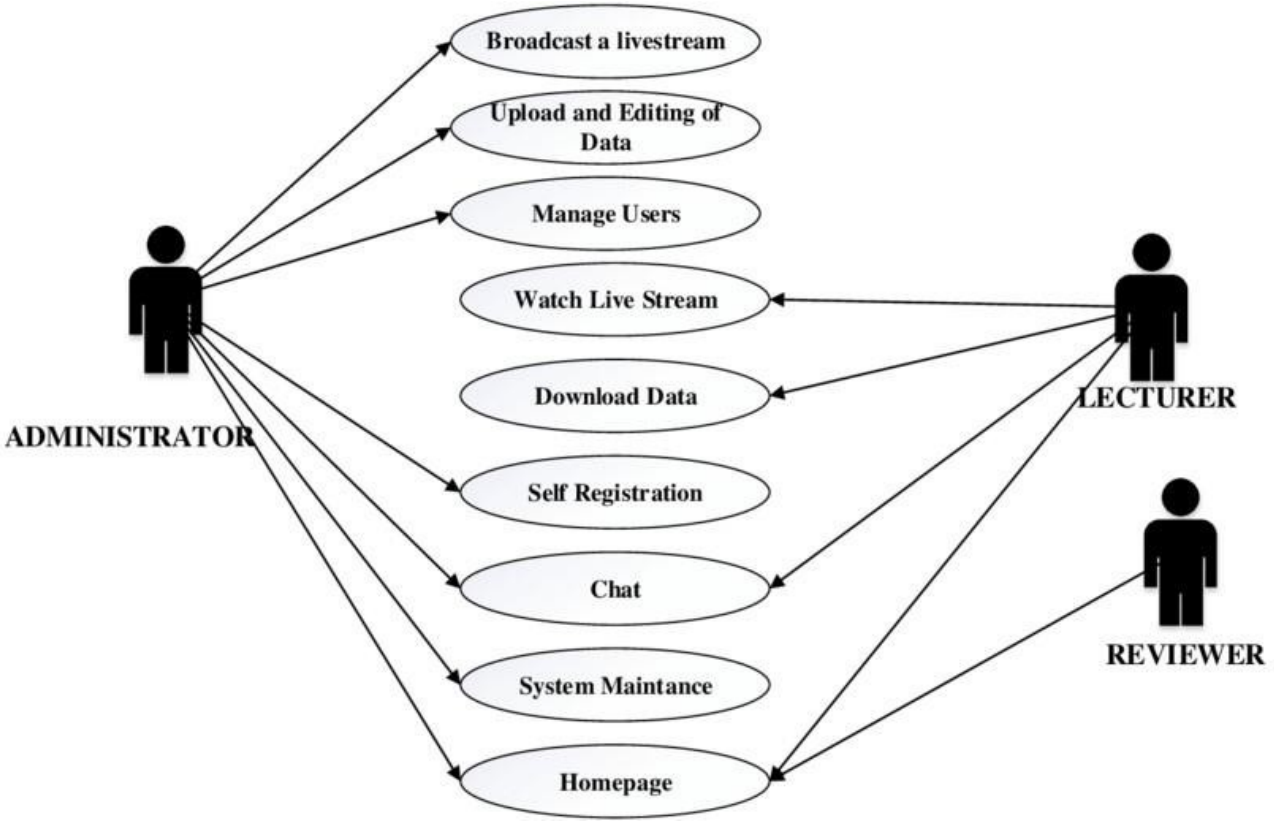


Figure-2: Use–Case Diagram

So the above diagram represents the point of view of the new user, the registered user, and the developer and the arrows to each module show the interactivity of the person.

The New user will first be required to create up a new account so will interact with the “sign-up module” and fill up all the details that will be stored in the database. The next user will land into the dashboard where there will be “search bar” where the user can enter the courses he desiresto read or any related keyword to the course. The list of course will appear on the screen and the new user will interact with “select the course” module. Then the user can interact with the “Description of the Course” module to read more about the courses.

For the registered user, the user will be having the credentials to login and will interact with the “login module” and then the user will enter intothe dashboard where there will be “search bar” where the user can enter

the course he desires to read or any related keyword to the course. The list of courses will appear on the screen and the new user will interact with “select the course” module. Then the user can interact with the “Description of the course” module to read more about the course.

For the developer he can connect with each and every module mentioned in the use case diagram. Apart from the modules mentioned in use case diagram there are modules like profile, sign out, FAQ and about us section that every registered user can access.

2. DATA FLOW DIAGRAM

The course list details contain the mentor name, the course template, the course topic, and a short review about the course, the price of the course and the link to buy the course. The plus point of this app is it is connected to the Google E-learning API so as soon as a new course is published; itis automatically to the website also.

As soon as the user encounters with the login module, we check the credentials of the user if the credentials are correct as per the database we proceed to the dashboard else if wrong we encounter the forget password module and then mail is sent to the registered mail id. From the dashboard module, we can interact with the favourites section, the profile module, the FAQ Section, The sign out section. On searching the course, from the dash board module, we encounter the check course list activity, checking the course details activity and the published date activity.

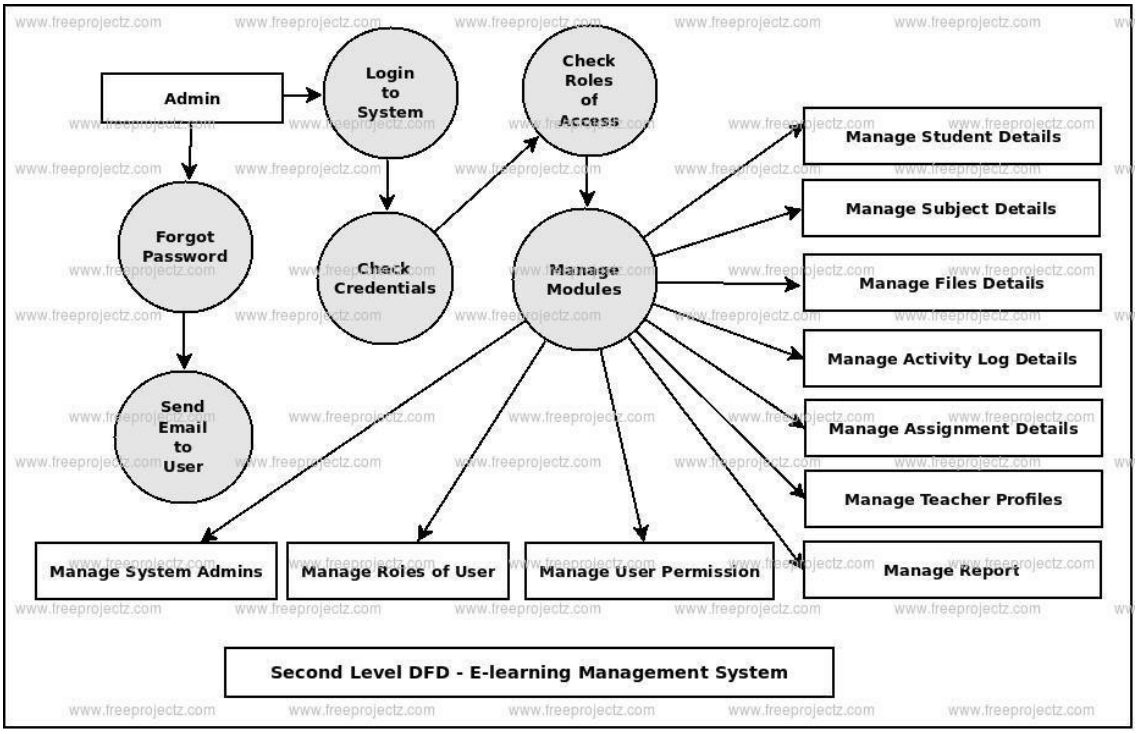


Figure-3: Data Flow Diagram

3. SEQUENCE DIAGRAM

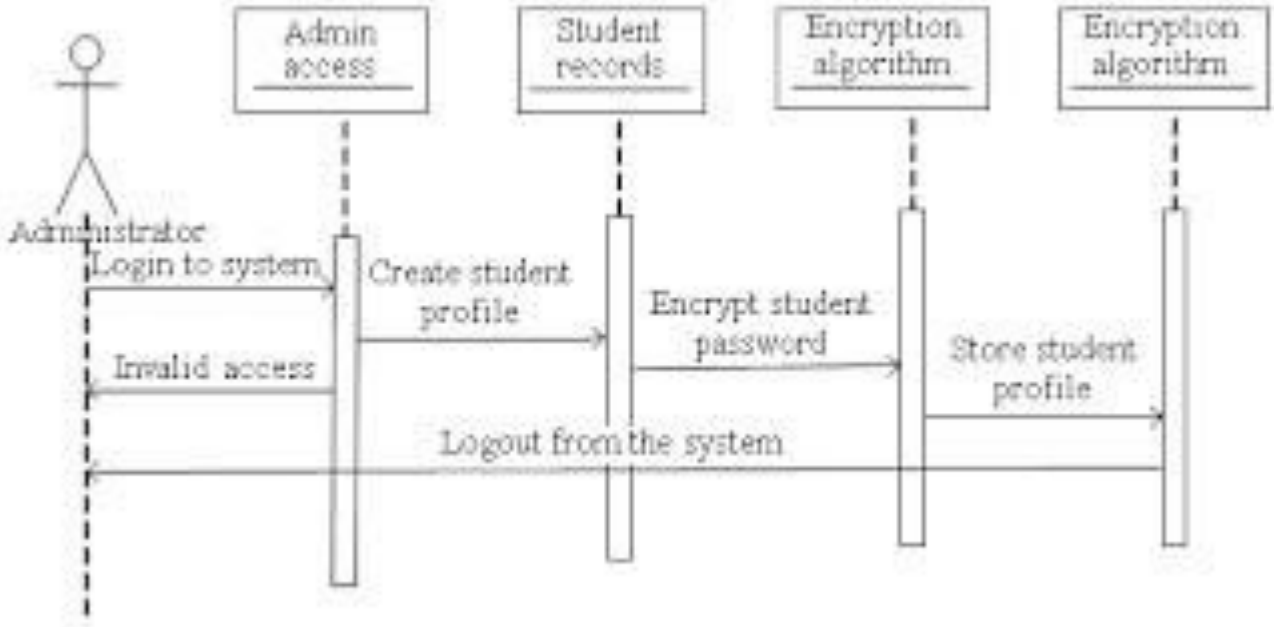


Figure-4: Sequence Diagram

Software Testing

Software testing is an investigation conducted to provide stakeholders with information about the quality of the software product or service under testing. Software testing is a process of executing a program or application with intent of finding the software bugs.

It can also be stated as the process of validating and verifying that a software program or application.

Various test cases are as follows:

1. Testing of login session:

Sr. No	Test Cases	Feature	Description	Steps to Execute	Test Data/ Input
1.	TC-1	User Interface	Check all thetest boxes ,radio buttons ,butto ns etc.	1.Click on Radio buttons ,buttons and dropdown list	
2.	TC-2	Required fields	Check the required fields by not filling any data	1.Do not enter any value in thefields 2.Click on Signup button	NIL
3.	TC-3	Required fields	Check required fieldsby filling the data	1.Enter the valid values inrequired fields 2.Click on Signup button	NIL

Table No. 1

1. User Testing

User testing is the process through which the interface and functions of a website, app, product, or service are tested by real users who perform specific tasks in realistic conditions. The purpose of this process is to evaluate the usability of that website or app and to decide whether the product is ready to be launched for real users.

This website was tested by our team mates and friends who are using different mobile phones also tested on different emulator to check its performance and it seems to be working fine and users of this app are satisfied with the facilities and performance of the website and like theway how the website is worked.

2. Performance Testing

In this type of testing we have checked the performances of ourwebsite under some peculiar conditions are checked. Those conditions include:

- Low memory in the device.
- The battery in extremely at a low level.
- Poor/Bad network reception.

Performance is basically tested from 2 ends, application end, and the application server end. Our app is also performing well in this phase of testing as well. And we are getting positive feedback from user of our website.

3. **Compatibility Testing**

This website was tested and used on different devices like chrome ,tablet. The website worked fine and is stable. The application worked fine in portrait mode and there isn't any problem with compatibility.

On all types of testing (that we have performed above) our performing well on our website i.e. Crystal Blues.

CONCLUSION

Crystal blue's is a website that will allow users to search for ornaments and Jewellery. This website takes in a user input and searches the E-Commerce website with the user input and gets a list of Courses based on the users search query. Search result screen will contain a list of courses with following details.To get the information of the particular course user can click upon the course fromthe list and then will be taken to the new tab where description and other information related to the Course will be available.

REFERENCES

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- W3SCHOOL
- Front End: The Complete Reference