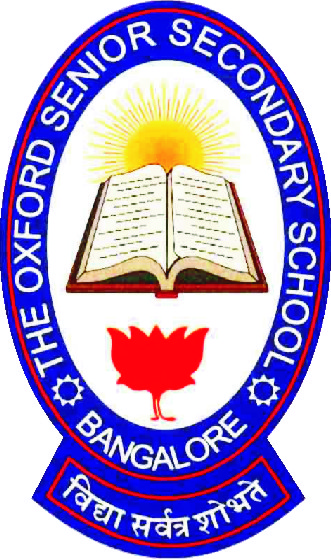
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**THE OXFORD SENIOR SECONDARY SCHOOL**

**PROJECT REPORT**

**ON**

**(TITLE OF YOUR PROJECT)**

**(PICTURE)**

**Submitted to: Submitted by:**

***Write SUBJECT TEACHER NAME* NAME:**

**(Smitha Mathews/S Sharadha) CLASS:XII(*STREAM*)**

**PGT-Computer Science ROLL NO:**

**SUBJECT: COMPUTER SCIENCE**

**SESSION:2024-25**

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|  | **THE OXFORD SENIOR SECONDARY SCHOOL**  **(Affiliated to C. B. S. E., New Delhi)**  **I Phase, J P Nagar, Bengaluru-560078** |  |

**CERTIFICATE**

This is to certify that the project entitled ‘( ***write your project topic in bold*** )’ is a bonafied work done by (***name of the student***)of Class XII(***stream***), Session 2024-25 in the partial fulfilment of CBSE AISSCE Examination 2024 and has been carried out under my supervision and guidance.

|  |  |
| --- | --- |
| **Roll Number** | **:** |
| **Date of the Examination** | **:** |
| **Signature of the Internal Examiner** | **:** |
| **Signature of the External Examiner** | **:** |
| **Signature of the Principal** | **:** |

**ACKNOWLEDGEMENT**

I would like to express my special thanks of gratitude to my teacher (***name of the teacher***) as well as Ms. Mala Banerjee, Principal, who gave me the golden opportunity to do this wonderful project on the topic (write project topic) which also helped me doing a lot of research and I came to know about so many new things. I am really thankful to them.

Secondly, I would also like to thank my parents and friends who helped me a lot in finalizing this project within the limited time frame.

Last but not least , I would like to thank all those who had helped towards the completion of this project.

Name of the student

Class-XII(stream)

**INDEX**

|  |  |  |
| --- | --- | --- |
| **S.NO.** | **CONTENTS** | **PAGE NO.** |
|  | INTRODUCTION OF THE PROJECT |  |
|  | OBJECTIVES AND SCOPE OF THE PROJECT |  |
|  | HARDWARE AND SOFTWARE SPECIFICATIONS |  |
|  | WORKING ENVIRONMENT |  |
|  | FUNCTIONS AND MODULES USED IN THE PROJECT |  |
|  | SYSTEM DEVELOPMENT LIFE CYCLE |  |
|  | SOURCE CODE |  |
|  | OUTPUTS |  |
|  | FUTURE SCOPE OF THE PROJECT |  |
|  | CONCLUSION |  |
|  | BIBLIOGRAPHY |  |

**INTRODUCTION OF THE PROJECT**

**HARDWARE AND SOFTWARE SPECIFICATIONS**

**Hardware:**

Processor: Intel(R) Core(TM) i5-10505 CPU @

Processor Speed: 3.20 GHz

RAM: 2 GB or more

Hard Disk: 512 GB

**Software:**

Operating System: Windows 7 or above

IDE: IDLE Python

Front End: Python 3.6 or above

Back End: My SQL Server 5.0 or above

**WORKING ENVIRONMENT**

**What is Python?**

Python is a opular programming language. It was created by Guido van Rossum, and released in 1991.

It is used for:

* Web development(server side)
* Software development
* Data analysis
* System scripting

**What Python can do?**

* Python can be used on a server to create web applications
* Python can be used alongside software to create workflows
* Python can connect to database systems. It can also read and modify files
* Python can be used to handle big data and perform complex mathematics
* Python can be used for rapid prototyping, or for production ready software development

**What is MySQL?**

MySQL is an open source relational database management system(RDBMS). It is the most popular database system used with PHP. MySQL is developed, distributed and supported by Oracle Corporation.

* The data in MySQL database are stored in tableswhich consist of rows and columns
* MySQL is a database system that runs on a server
* MySQL is ideal for small and large applications
* MySQL is very fast, reliable and easy to use database system. It uses standard SQL
* MySQL compiles on a number of platforms

**Interface Python with MySQL**

MySQL Python/Connector is an interface for connectin gto a MySQL database server from Python. It implements the Python database API and is built on top of the MySQL.

The general workflow of a Python program that interacts with a MYSQL based database is as follows:

1. Connect to the MySQL server
2. Create a new database
3. Connect to the newly created or an existing database
4. Execute a SQL query and fetch results
5. Inform the database if any changes are made to a table
6. Close the connection to the MySQL server

**FUNCTIONS AND MODULES USED IN THE PROJECT**

**Modules used in the project:**

1. Mysql.connector

This is used to connect mysql database with Python

(here you mention all the standard modules imported to your project)

**User Defined Functions in Project**

(***Here you have to explain the functioning of your project***

***What functions you will use and what operations it will perform***)

**SYSTEM DEVELOPMENT LIFE CYCLE**

SDLC is a step by step procedure or systematic approach to develop software and it is followed within a software organization. It consists of various phases which describe how to design, develop, enhance and maintain particular software.

**Phase 1: Requirement collection and analysis**

In this phase mainly focus on gathering the business needs from the customer. It determines the requirements like ; what should be the input data to the system? Who is going to use the system? What should be the output data by the system? These questions are getting answered during this phase.

**Phase 2: Feasibility Study**

In this step, we examine the feasibility of the proposed system. The decision is taken based on cost, time, resources, etc.

**Phase 3: Design**

Design is a blueprint of the application and it helps in specifying hardware and requirements of the system and helps in defining architecture of the system.

**Phase 4: Coding**

Once the system design document is ready, in this phase developers start writing the code using any programming language i.e., they start developing the software.

Generally task is divided into units or modules and assigned to the developers and this coding phase is the longest phase of SDLC.

**Phase 5: Testing**

During this phase, test engineers may encounter some bugs/defects which need to be sent to the developers, the developers fix the bug and sent back to test engineers for testing.

**Phase 6: Installation/Deployment**

Once the product is developed, tested and works according to the requirement, it is installed/ deployed at customer place for their use.

**Phase 7: Maintenance**

When the customer starts using the software, they may face some issues and needs to be solved from time to time means need to fix those issues, tested and handed over back to the customer as soon as possible, which is done in the maintenance phase.

**SOURCE CODE**

**OUTPUTS**

**FUTURE SCOPE OF THE PROJECT**

*(here you can specify any modifications to the project that you would have incorporated if time and other parameters were sufficient)*

**CONCLUSION**

**BIBLIOGRAPHY**

To develop this project many references were used:

1. **Computer Science with Python** by Sumita Arora, Dhanpat Rai Publications

(write reference to all websites and books used)