MINI PROJECT REPORT ON

REGISTRATION SYSTEM FOR BIRTH CERTIFICATE

Submitted in partial fulfillment of the requirement for the award of degree in

MASTER OF COMPUTER APPLICATIONS

of the

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Submitted by

SREEJITH K.M

NCE21MCA-2048

Under the guidance of

Mr.Pramod.K MCA

ASSOCIATE PROFESSOR

DEPARTMENT OF MCA

NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE,

(NAAC Re-Accredited with "A" grade) PAMPADY,

THIRUVILWAMALA, THRISSUR - 680567 NOVEMBER 2022

MINI PROJECT REPORT ON

REGISTRATION SYSTEM FOR BIRTH CERTIFICATE

Submitted in partial fulfillment of the requirement for the award of degree in

MASTER OF COMPUTER APPLICATIONS

of the

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Submitted by

SREEJITH K.M

NCE21MCA-2048

Under the guidance of

Mr.Pramod.K MCA

ASSOCIATE PROFESSOR

DEPARTMENT OF MCA

NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE ,

NOVEMBER 2022

NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

DEPARTMENT OF MCA

COLLEGE VISION

To mould true citizens who are millennium leaders and catalysts of change through excellence in education.

COLLEGE MISSION

NCERC is committed to transform itself into a center of excellence in Learning and Research in Engineering and Frontier Technology and to impart quality education to mould technically competent citizens with moral integrity, social commitment and ethical values. We intend to facilitate our students to assimilate the latest technological know-how and to imbibe discipline, culture and spiritually, and to mould them in to technological giants, dedicated research scientists and intellectual leaders of the country who can spread the beams of light and happiness among the poor and the underprivileged.

DEPARTMENT VISION

To create a school of distinction for the PG students, prepare them to be industry-ready, and achieve Academic excellence by continuous endorsement of the Faculty team in terms of Academics, Applications & Research.

DEPARTMENT MISSION

The Department of Computer Applications strives to provide quality and competency-based education and fine-tune the younger generation through Curricular, Co- Curricular and Extra-curricular activities so as to encounter the Professional and Personnel challenges ahead with Pragmatic skills & courage, thereby 'Creating the True Citizens'.

NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE, PAMPADY

CERTIFICATE

This is to certify that, the work entitled **"REGISTRATION SYSTEM FOR BIRTH CERTIFICATE"** has been presented by **SREEJITH K.M (NCE21MCA-2048)** of Third Semester MCA in Partial Fulfillment of the requirement for the award degree **MASTER OF COMPUTER APPLICATIONS, APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY.**

We also certify that the work done is original.

Project guide **Head of the department**

Principal **External Examiner**

DECLARATION

I hereby declare that the project Report entitled **"REGISTRATION SYSTEM FOR BIRTH CERTIFICATE"** Submitted to the **Department of MCA at Nehru College of Engineering And Research Centre** in partial fulfillment of the requirement for the award of degree in **MASTER OF COMPUTER APPLICATIONS** from **A P J ABDUL KALAM TECHNLOGICAL UNIVERSITY,** is a record of original work done by me under the guidance of Mr.**Pramod.K** Assistant Professor of the Department of MCA, during my Third Semester MCA course period 2023.

PLACE:PAMPADY

DATE: **SREEJITH K.M**

ACKNOWLEDGEMENT

First and most, I thank the God Almighty for showing me the path to the completion of project work. I thank **Prof**. **Dr. Ambika Devi Amma T**, the Principal **NCERC**, for providing good atmosphere for project completion and presentation. I thank **Prof**. **Dr. Sudheer S Marar**, Head of MCA Department, NCERC for his valuable suggestions and support throughout the project work. I wish to acknowledge our deep sense of gratitude and heartfelt thanks to my project guide Mr.**Pramod.K** Associate Professor of the Department of MCA for their valuable suggestions, precious time, kind hearted motivations throughout the project work period. I express my immense gratitude to all my friends, without whom I would have never been able to do my project well.

ABSTRACT

This is a web application that manages, stores, and retrieves Birth Certificates. This application allows certain organizations to manage their members' Birth Certificates. The application was developed using PHP and MySQL Database Free. It has a pleasant user interface and consists of user-friendly features and functionalities. This Online Birth Certificate Management System has 2 types of user roles which are the Administrator and the Users. Both users are required to log in with their valid system credentials to gain access to the features and functionalities of the said system.The Administrator user is the one who is in charge of managing all the records on this PHP Project. On the Admin Site, the administrator can list, manage, and update members' birth details or records. The admin can also generate the list of the applications between dates they wanted. He/She can also find the records of a certain person only by entering the Application Number.Users can create their system account by filling in all the required fields on the Registration Page. After the successful registration, the system requires the users to log in by entering their mobile number and password. The normal users are the ones who can register the application of the members. He/she can also list all the members' records that he/she added to the system. The users can also view the printable Birth Certificate of the member.

CONTENTS

List of Figures

List of Tables

Chapter 1

Introduction

1.1 Background

Birth registration is the official recording of the birth of a child by a state administrative process of the country, and coordinated by a particular branch of government. It is the permanent and official record of a child's existence and is fundamental to the realization of children's rights and practical needs. Securing children's rights to a nationality will allow them to get a passport, open a bank account, vote and find employment. It helps ensure access to basic services, including immunization, health care and school enrolment at the right age. At present it is estimated that thousands of Somaliland children are not being registered at birth, meaning that these children are being denied the right to a name and nationality, a situation that may also lead to barriers in accessing other rights including health care and education. One important area where data collection is essential on human population is vital registration; which is "the continuous, permanent, compulsory and universal recording universal recording of the occurrence and characteristics of vital events pertaining to the population as provided through decree or regulation in accordance with the legal requirements of a country." collecting data on human population is,therefore, a complex series of related activities. There is no gainsaying the fact that accurate population statistics is vital to sound development planning and economic management. This explains the seriousness attached to the assemblage of population and vital statistics in the country today. Apart from the information on the stock of country's population, it is essential to know the rate at which the population is changing. structurally and in the aggregate.

1.1.1 Motivation

The main motivation is to reduce the burden on administrative staff in processing and issuing birth certificates. In many cases, administrative staff are overwhelmed with paper work and the process of issuing birth certificates can be very time consuming. The e-birth certificate system will automate the process and allow administrative staff to focus on other tasks. Additionally, the e-birth certificate system will allow for the issuance of birth certificates to be completed electronically, which will reduce the chances of errors and improve efficiency.

1.2 Objective

The objectives of this project are:

- Used to easily register for the Birth Certification.
- The system minimized paperwork for Birth Application.
- As the paper-based documents can easily be damaged and lost.
- Availability of the real-time data.
- It also resolved the risk of tripping to and fro User just to apply for Birth Application and to get the certificate.
- The system also saves time than the manual process.
- Digital based documents are considered environment friendly.
- Paper based documents are Hard to recover as compared to Digital.
- Can easily verify without wasting much time going to the place for Birth Certification.
- It will facilitate the easy presentation of reports pertaining to birth monitoring

- The database can be used for record storage, processing, retrieval, and certification.
- Flexible system that can be adjusted based on changing requirements and to develop a system that can improve operational efficiency.

.

1.3 Contribution

The major contributions in this project are:

1. The project has helped in the computerization of the process of registration of births.
2. The project has helped in the standardization of the format of birth certificates.
3. The project has helped in the issuance of electronic birthcertificates.
4. The project has helped in the reduction of the turnaround time for the issuance of birth certificates.

1.4 Report Organization

The project report is divided into six sections. Section 2 describes literature survey. Section 3 describes the methodology and section 4 describes agile methodology used for implementing the project. Section 5 gives the results and discussions. Finally, Section 6 gives the conclusion

Chapter 2

LITERATURE SURVEY

Birth Registration is a fundamental right of all children and a basic function of all modern governments. Promoting children's right to birth registration falls clearly within UNICEF's mandate. Birth Registration comprises two elements: entering details of a child's birth into official government records, and issuing a birth certificate to the child's parents, including information on the parents' names, date and place of birth and further information such as nationality. There has been some progress, though small in raising birth registration levels.

Although birth registration is almost complete in all developed countries, the lack of progress on civil registration in many developing countries means that global inequalities in birth registration are now extreme. The births of approximately 230 million children under the age of 5 have not been registered. Of these, around 85 million are in sub-Saharan Africa, 135 million in Asia (east and south Asia and the Pacific) and the remainder in the rest of the world. Birth registration may also be vital for confirmation of nationality following tumultuous events such as armed conflict and situations of state succession. The registration of births and acquisition of citizenship are distinct processes; however, birth registration serves as important proof of the facts that form the basis for conferral of citizenship at birth. More specifically it establishes a legal record of where the child was born and who his or her parents are and thus whether the child can acquire citizenship on the basis of place of birth or descent. Children who are not registered are excluded from the benefits of citizenship in ways that vary between countries. A birth certificate may be required to obtain access to basic services such as health and education, and it can also help to protect children from situations of exploitation and violence, such as child marriage and child labor, and achieve convictions against those who have abused a child.

The conventional method of birth registration is by human inspection. Manual birth registration is complex and impractical for large increase in population. The cost of registering a child, loss of registration certificate by the parent and child, inaccurate population statistics are possible problems which inaccurate birth registration records can cause. Birth registration became an issue of utmost importance as a result of difficulties encountered while obtaining accurate population statistics essential in social services planning for any government and in ensuring that adequate resources and budgets are made available to address the needs of the populace. The use of globally accessible device for birth registration has shown great potential in this field. The performance of the Online National Database for Birth Registration was evaluated in terms of accessibility, speed, cost and capacity; and the result confirmed that the proposed Online National Database for Birth Registration will be able to assist government officials in terms of having a globally accessible system, speeding up birth registration process, reducing cost of registering a child and capable of keeping registration details for future use.

Chapter 3

Methodology

3.1 Introduction

In this proposed project, is to proffer solutions to current backdrops experienced in the registration of birth. To resolved the issues and difficulties faced by citizens for the birth registration and again dealing with the government people to and fro for the certificate. So that citizen can easily get the certificate without wasting much time of self and of the government. There by fostering a more effective and can be taken easily with the online system and efficient data collection, storage becomes easy and managing the paper based certificate becomes difficult one can also lost it, processing becomes easy and retrieval method in case of any requirement of the certificate we can get it online.This project would also provide a means for nation planning by monitoring the birth rate increase or decrease and also on basis of that we can plan for the young citizens. Population Forecasting can be done using the reports option and pulling out the reports from system and can design the charts to get the quick information.

3.2 Hardware and Software Requirements

Hardware Requirements

- Processor: Dual core above
- RAM: 2GB RAM [minimum]
- Monitor : 15 INCH LED
- Keyboard: Standard 120 keys
- Mouse: ANY
- Hard disk: 120GB [minimum]

Software Requirement

- Operating system: Windows
- Tools : Notepad++, Xaamp
- Front end: PHP
- Backend : MySQL

3.3 MODULES

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

□ Admin Panel

Login screen: Admin can login into system by entering unique username and password that enables admin to access the online birth registration form, view, Verify, take reporting or print birth certificates.

Registration from: this page enables admin for new entry to register for birth by filling the form.

Dashboard: Gives the Quick view of the New, Verified and Rejected Applications. So that admin take quick actions as well.

View Details : In this section admin can be able to see all the forms that had submitted till now and can verified them.

Certificates Section: In which the admin can be able to view and print the certificate.

Profile: Can used to update the Name of user and address and can also check the first time logged into Portal with date and time.

Settings: Here user can reset the Password if he/she wants. And also, Logout: From here user can logout front the portal.

□ User Panel

Login screen: The User have to Sign Up if he is new user or else direct login into system by entering username and password that enables user to access the online birth registration form, view or print birth certificates.

Registration from: this page enables user to register for birth by filling the form.

View Details : In this section user can be able to see all the forms he had submitted till and if they are verified or not.

Certificates Section: In which the user can be able to view and print the certificate.

Profile: Can used to update the Name of user and address and can also check the first time logged into Portal with date and time.

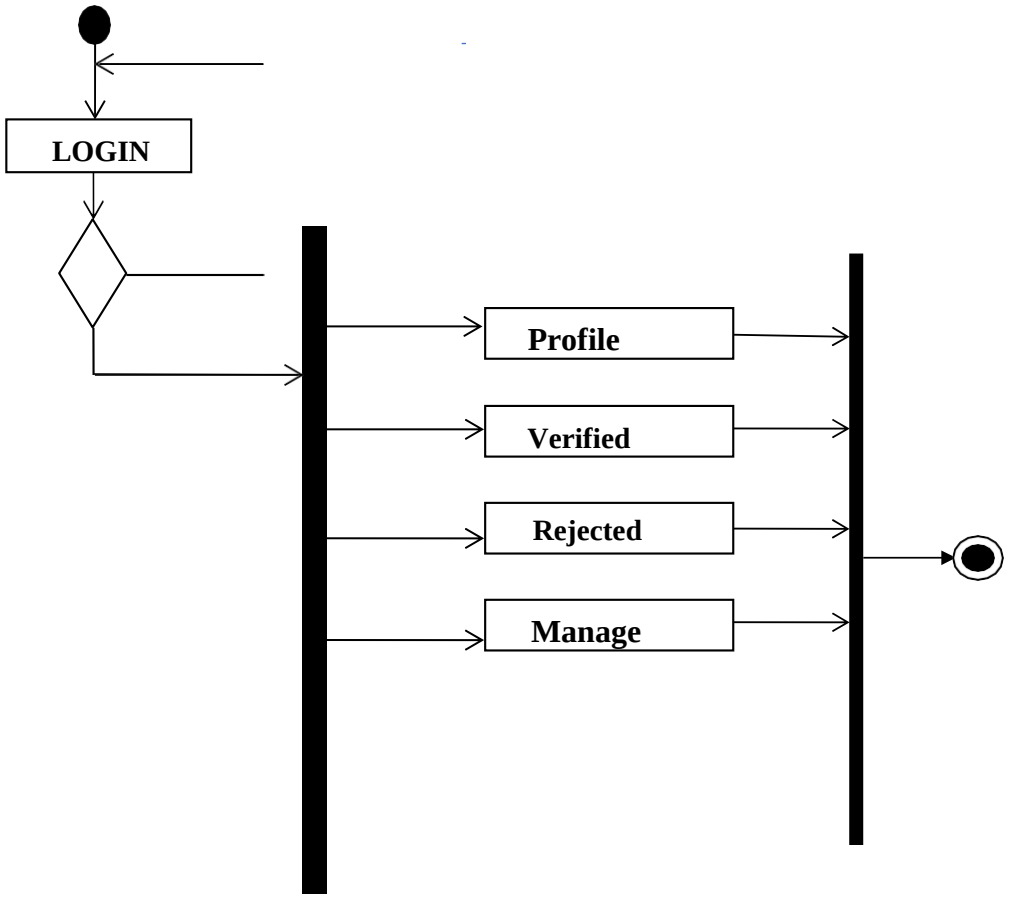
Settings: Here user can reset the Password if he/she wants. And also, Logout : From here user can logout the portal.

3.4 Work flow

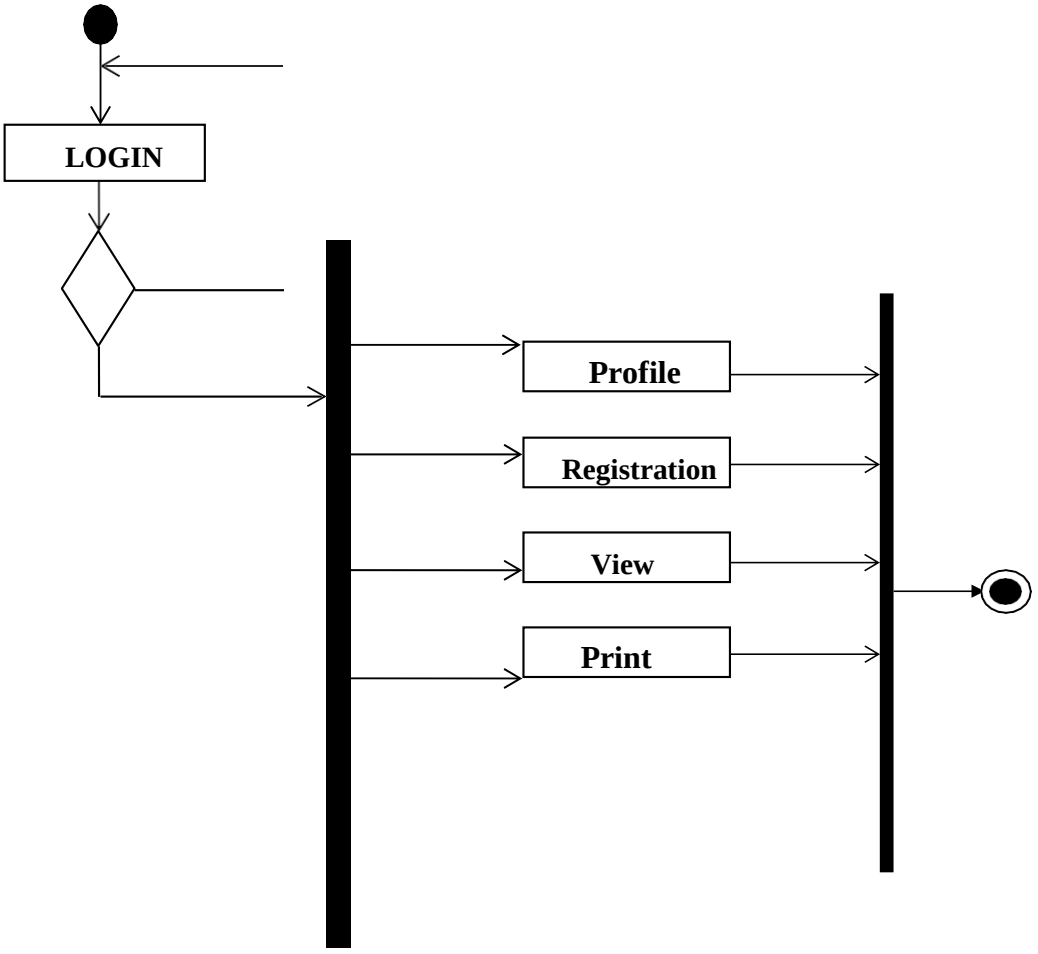
A workflow diagram is a visual layout of a process, project or job in the form of a flow chart. It's a highly effective way to impart the steps more easily in a business process, how each one will be completed, by whom and in what sequence.

ACTIVITY DIAGRAM

- **Admin Activity Diagram**



1) User Activity Diagram



UML DIAGRAMS

UML stands for Unified Modeling Language. UML is a standardized general-purpose modeling language in the field of object-oriented software engineering. The standard is managed, and was created by, the Object Management Group. The goal is for UML to become a common language for creating models of object-oriented computer software. In its current form UML is comprised of two major components: a Meta-model anda notation. In the future, some form of method or process may also be added to or associated with, UML. The Unified Modeling Language is a standard language for specifying, Visualization, Constructing and documenting the artifacts of software system, as well as for business modeling and other non-software systems. The UML represents a collection of best engineering practices that have proven successful in the modeling of large and complex systems. The UML is a very important part of developing objects oriented software and the software development process. The UML uses mostly graphical notations to express the design of software projects.

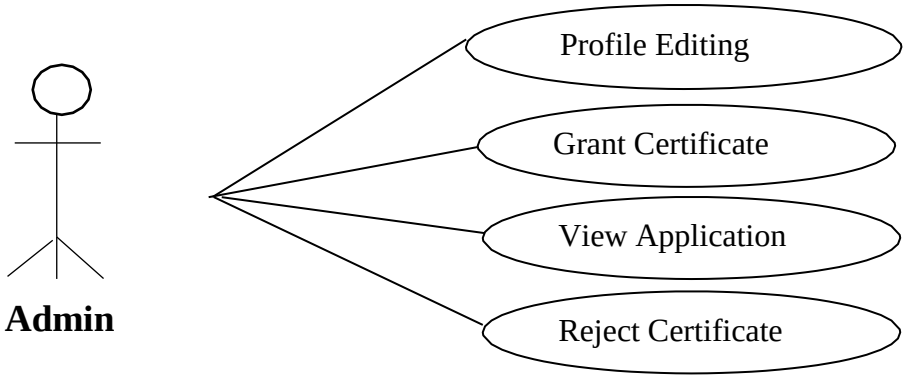
GOALS:

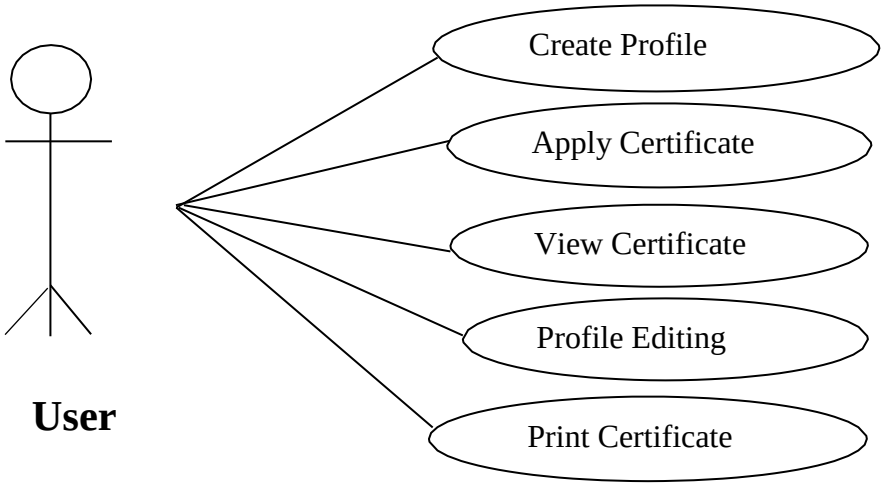
The Primary goals in the design of the UML are as follows:

1. Provide users a ready-to-use, expressive visual modeling Language so that they can develop and exchange meaningful models.
2. Provide extendibility and specialization mechanisms to extend the core concepts.
3. Be independent of particular programming languages and development process.
4. Provide a formal basis for understanding the modeling language.
5. Encourage the growth of OO tools market.
6. Support higher level development concepts such as collaborations, frameworks, patterns and components.
7. Integrate best practices.

USE CASE DIAGRAMS

A use case diagram in the Unified Modeling Language (UML) is a type of behavioral diagram defined by and created from a Use-case analysis. Its purpose is to present a graphical overview of the functionality provided by a system in terms of actors, their goals (represented as use cases), and any dependencies between those use cases. The main purpose of a use case diagram is to show what system functions are performed for which actor. Roles of the actors in the system can be depicted.


Profile Editing
Grant Certificate
View Application
Reject Certificate
Admin


Create Profile
Apply Certificate
View Certificate
Profile Editing
Print Certificate
User

Chapter 4

AGILE METHODOLOGY

4.1 Introduction

After the initial studies it is found that agile model of software development is suitable and is the best method for the development of this system. Agile methodology mainly focused on the client satisfaction through continuous delivery. Also, it sets a minimum number of requirements and turns them in to a deliverable product. As this project has many individual requirements which can be delivered in parts and the user can gradually improve their work efficiency. Agile methodology has a family of methods of which scrum is selected for the development of this project. Scrum is process framework that has been used to manage complex product development. It is not a process or technique for building products rather it is a framework within which various processes can be employed. Also, it is suitable method to support the development process. It focuses on lean software development and has in building better software effectively and efficiently. Agile is one of the most widely used and recognized software development frameworks. The methodology those experts agreed upon was described as 'lightweight' and fast. Agile isalso about being the adaptive and continuous improvement, as much as it is about constant feedback and speed of delivery. Agile is a software development approach where a self-sufficient and cross-functional team works on making continuous deliveries through iterations and evolves throughout the process by gathering feedback from the end users. The major rules in scrum methodology are:

1. Product owner (PO): Who represents the stake holder and the business.
2. The scrum master: Ensures the process followed, removes obstructions, and protects the development system.
3. Development team: Cross functional, self-organizing team who actually do the
4. actual analysis, design implementation and testing process.

They work together in iterative time boxed durations called sprints. The first step is the creation of the product backlog by the PO. It's a to-do list of stuff to be done by the scrum team. Then the scrum team selects the top priority items and tries to finish them within the time box called a sprint. An easier way to remember all of this is to memorize the 3-3-5 frame-work. It means that a scrum project has 3 roles, 3 artifacts, and 5 events

These are:-

1. Roles: Product Owner, Scrum Master, and development team.
2. Artifacts: Product Backlog, Sprint Backlog and Product Increment.
3. Events: Sprint, Sprint planning, Daily Scrum, Sprint review and Sprint retrospective

The framework begins with a simple premise start with what can be seen or known. After that the progress is tracked and tweak as necessary. The three pillars of scrum are transparency, inspection and adaptation. In scrum everyone has a role..Git is used as the version control system for this project. Version control is a system that record changes to a file or set of files over time so that a specific version can be recalled later. Version control system are a category of software tools that helps a software team for managing changes to source code over time.

4.2 User Story

A user story is a tool used in agile software development to capture a description of software feature from an end-user perspective. The user story describes the type of user, what they want and why. A user story helps to create a simplified description of a requirement.

User Story ID	As a <Type of user>	I want to perform <some task>	So that I can <achieve some goal>
1	USER,RESORT	Register to the system	Access the system
2	USER , RESORT	Login	Access the account
3	USER	Booking Resort	Enter Details
4	USER	Payment	Get Result
5	USER	Profile	Status View

Table 4.1 user story

4.3 Product Backlog

A product backlog is a list of the new features, changes to existing features, bug fixes, infrastructure changes or other activities that a team may deliver in order to achieve a specific outcome. The product backlog is the single authoritative source for things that a team works on. That means that nothing gets done that isn't on the product backlog. Conversely, the presence of a product backlog item on a product backlog does not guarantee that it will be delivered. It represents an option the team has for delivering a specific outcome rather than a commitment. It should be cheap and fast to add a product back log item to the product backlog, and it should be equally as easy to remove a product backlog item that does not result in direct progress to achieving the desired outcome or enable progress toward the outcome. The Scrum Product Backlog is simply a list of all things that needs to be done

within the project. It replaces the traditional requirements specification artifacts. These items can have a technical nature or can be user-centric e.g., in the form of user stories. The product backlog of the system is given in Table4.2

PRODUCT BACKLOG			
ID	Name	Priority	Estimate[Hrs.]
1	Registration	1	15
2	Login	2	12
3	Apply	3	10
4	Grant	4	8
5	Profile update	5	4

Table 4.2: Product Backlog

4.4 Project Plan

A project plan that has a series of tasks laid out for the entire project, listing task durations, responsibility assignments, and dependencies. Plans are developed in this manner based on the assumption that the Project Manager, hopefully along with the team, can predict up front everything that will need to happen in the project, how long it will take, and who will be able to do it. Project plan is given in Table 4.3

User story ID	Task Name	Start Date	End Date	Days	Status
Sprint 1		18-08-2022	14-09-2022	**24**	**Completed**
1	Registration	18-08-2022	30-08-2022	12	Completed
2	Coding	01-09-2022	07-09-2022	6	Completed
3	Testing	08-09-2022	14-09-2022	6	Completed
Sprint 2				**21**	**Completed**

4	Registration	15-09-2022	14-09-2022	2	Completed
5	Coding	15-09-2022	09-10-2022	3	Completed
6	Testing	29-09-2022	26-09-2022	7	Completed
Sprint 3				**8**	**Completed**
7	Coding	15-09-2022	26-09-2022	4	Completed
8	Testing	29-09-2022	09-10-2022	4	Completed
Sprint 4				**8**	**Completed**
9	Database Connectivity	16-10-2022	27-10-2022	4	Completed
10	Apply	28-10-2022	04-11-2022	4	Completed
11	Grant	28-10-2022	04-11-2022	**8**	**Completed**
Sprint 5					
12	Deployment	05-11-2022	12-11-2022	4	Completed
13	Testing and Validation	13-11-2022	22-11-2022	4	Completed

Table4.3: Project plan

The Project has five sprints:

1. Sprint 1

Three tasks are planned in this sprint. First one is Problem definition , next is designing and initial coding

2. Sprint 2

Three tasks are planned in this sprint. First one is design and development of forms and next one is testing.

3. Sprint 3

Two tasks are planned in this sprint. First one is design and development of forms and next one is testing

4 . Sprint 4

Three tasks are planned in this sprint. These are database connectivity and development of web user interface using PHP and Integration of MY SQL SERVER

5. Sprint 5

In this sprint two tasks are planned to complete, one is Deployment of web app and Booking and second is testing and result discussion.

4.5 Sprint Backlog (Plan)

The sprint backlog is a list of tasks identified by the Scrum team to be completed during the Scrum sprint. During the sprint planning meeting, the team selects some number of product back log items, usually in the form of user stories, and identifies the tasks necessary to complete each user story. Most teams also estimate how many hours each task will take someone on the team to complete.

Sprint 1:

Three tasks are planned in this sprint. First one is Problem definition , next is designing and initial coding.Sprint backlog(planning)for print 1 is given in Table

Sprint 2:

Three tasks are planned in this sprint. First one is design and development of forms and next one is testing. Sprint backlog(planning)for sprint 2 is given in Table 4.5

Sprint 3:

Two tasks are planned in this sprint. First one is design and development of forms and next one is testing. The sprint backlog for sprint 3 is given in Table 4.6

Sprint 4:

Three tasks are planned in this sprint. These are database connectivity and development of web user interface using PHP and Integration of MY SQL SERVER. The sprint backlog for sprint 4 is given in Table4.7

Sprint 5:

In this sprint two tasks are planned to complete, one is Deployment of web app and Booking and second is testing and result discussion.. The sprint backlog for sprint 4 is given in Table4.7

Backlog item	Completion time	Original estimate in hours	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14
User Story #1 Hours			hours	hours	hours	hours	hours	hours	hours	hours	hours	hours	hours	hours	hours	hours
Registration	30-08-2022	6	1	1	1	1	1	1	0	0	0	0	0	0	0	0
Coding	07-09-2022	4	1	1	1	1	0	0	0	0	0	0	0	0	0	0
Testing	14-09-2022	4	0	0	0	0	0	0	0	0	1	1	1	1	1	1
Total		14	2	2	2	2	1	1	0	0	0	1	1	1	1	1

Table 4.4: Sprint Backlog(Plan)-Sprint 1

Backlog item	Completion date	Original estimate in hrs.	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12
User story#1hrs.			Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.
Coding	26/09/2022	6	1	1	1	1	1	1	0	0	0	0	0	0
Testing	09/10/2022	5	0	0	0	0	0	0	0	1	1	1	1	1
Total		11	1	1	1	1	1	1	0	1	1	1	1	1

Table 4.5: Sprint Backlog(Plan)-Sprint 2

Backlog item	Completion date	Original estimate in hrs.	Day 1	Day 2	Day 3	Day 4
User story#1			Hrs.	Hrs.	Hrs.	Hrs.
DB connectivity	27/10/2022	5	2	1	1	1
Testing	04/11/2022	7	2	1	2	2
Total		12	4	2	3	3

Table 4.6: Sprint Backlog (Plan)-Sprint 3

Backlog item	Completion date	Original estimate inhrs.	Day 1	Day 2	Day 3
User story#1			Hrs.	Hrs.	Hrs.
Deployment	12/11/2022	4	2	1	1
Testing and validation	22/11/2022	4	2	1	1
Total		8	4	2	2

Table 4.7: Sprint Backlog (Plan)-Sprint 4

4.6 Sprint Backlog (Actual)

Actual sprint backlog is what adequate sprint planning is actually done by project team there may or may not be difference in planned sprint backlog. The detailed sprint backlog(Actual)is given below.

Backlog item	Completion date	Original estimate in hrs.	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12
User story#1 hrs.			Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.
Registration	30/08/2022	6	1	1	1	1	1	1	0	0	0	0	0	0
Coding	07/09/2022	4	1	1	1	1	0	0	0	0	0	0	0	0
Testing	14/09/2022	4	0	0	0	0	0	0	0	0	1	1	1	1
Total		14	2	2	2	2	1	1	0	0	1	1	1	1

Table 4.9: Sprint Backlog(Actual)-Sprint1

Backlog item	Completion date	Original estimate in hrs.	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12
User story#1hrs.			Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.
Coding	26/09/2022	6	1	1	1	1	1	1	0	0	0	0	0	0
Testing	09/10/2022	5	0	0	0	0	0	0	0	1	1	1	1	1
Total		11	1	1	1	1	1	1	0	1	1	1	1	1

Table 4.10: Sprint Backlog(Actual)-Sprint2

Backlog item	Completion date	Original estimate in hrs.	Day 1	Day 2	Day 3	Day 4
User story#1			Hrs.	Hrs.	Hrs.	Hrs.
DB connectivity	27/10/2022	5	2	1	1	1
Testing	04/11/2022	7	2	1	2	2
Total		12	4	2	3	3

Table 4.11: Sprint Backlog (Actual)-Sprint 3

Backlog item	Completion date	Original estimate in hrs.	Day1	Day2	Day3
User story#1			Hrs.	Hrs.	Hrs.
Deployment	12/11/2022	4	2	1	1
Testing and validation	22/11/2022	4	2	1	1
Total		8	4	2	2

Table 4.12: Sprint Backlog (Actual)-Sprint 4

4.7 Product Backlog Review

REVIEW FORM

Sprint 1

Version: 1.0 Date13/05/2022

User Story ID	Comments from Scrum master if any	Comments from Product Owner if any
1	Developer should have a easy registration process	User friendly registration
2	effective login	if there is forgot password or username handled.

Table 4.9: Product Backlog Review (Sprint1)

Sprint 2

Version:1.0 Date29/05/2022

User Story ID	Comments from Scrum master if any	Comments from Product Owner if any
3	User should have a easy registration process	User friendly registration
4	effective login	if there is forgot password or username handled.

Table 4.10: Product Backlog Review (Sprint2)

Sprint 3

Version: 1.0 Date13/07/2022

User Story ID	Comments from Scrum master if any	Comments from Product Owner if any
5	should check the data inserted correctly	inserted.
6	Design and development of registration forms	Should customize different mode

Table 4.11: Product Backlog Review (Sprint3)

Sprint 4

Version: 1.0 Date13/07/2022

User Story ID	Comments from Scrum master if any	Comments from Product Owner if any
7	should check database connectivity	Check connection.
8	Booking	Enter Details.

Table 4.12: Product Backlog Review (Sprint4)

Sprint 5

Version: 1.0 Date13/07/2022

User Story ID	Comments from Scrum master if any	Comments from Product Owner if any
9	Deployment	Visualize final output.
10	Generate predicted result .	Satisfied.

Table 4.13: Product Backlog Review (Sprint5)

4.8 Sprint Review:

At the end of each sprint a Sprint Review meeting is held. During this meeting the Scrum Team shows which Scrum Product Backlog items they completed (according to the Definition of Done) during the sprint. This might take place in the form of a demo of the new features. Backlog items that are not completed shall not be demonstrated. Otherwise this might suggest that these items are finished as well. Instead incomplete items/remaining activities shall be taken back into the Scrum Product Backlog, re-estimated and completed in one of the following sprints. The Sprint Review meeting should be kept very informal. No Power Point slides should be used and time for preparation and performing the meeting should be limited. During the meeting the Scrum Product Owner inspects the implemented backlog entries and accepts the solution or adds new stories to the Scrum Product Backlog to adapt the functionality. Participants in the sprint review typically include the Scrum Product Owner, the Scrum Team and the Scrum Master. Additionally management, customers, and developers from other projects might participate as well.

REVIEW FORM

SPRINT 1

Version: 1.0 **Date: 15/02/2022**

User story ID	Comments from Scrum master if any	Comments from Product Owner if any
1	Developer should have a easy registration process	Satisfied
2	effective login	Successful

Table 4.14: Sprint Review (Sprint1)

SPRINT 2

Version: 1.0 **Date: 15/02/2022**

User story ID	Comments from Scrum master if any	Comments from Product Owner if any
3	User should have a easy registration process	Satisfied
4	effective login	Successful

Table 4.15: Sprint Review (Sprint2)

SPRINT 3

Version: 1. 0 **Date: 15/02/2022**

User story ID	Comments from Scrum master if any	Comments from Product Owner if any
5	Should check the data inserted correctly	Correctly Successful.
6	Design and development of registration forms.	Satisfied.

Table 4.16: Sprint Review (Sprint3)

SPRINT 4

Version: 1. **Date: 15/02/2022**

User story ID	Comments from Scrum master if any	Comments from Product Owner if any
7	Should check database connectivity.	Connection successful.
8	Booking	Successful.

Table 4.17: Sprint Review (Sprint4)

SPRINT 5

Version: 1.0 **Date: 15/02/2022**

User story ID	Comments from Scrum master if any	Comments from Product Owner if any
9	Deployment completed	Satisfied
10	Output generated	Satisfied with result

Table 4.18: Sprint Review (Sprint5)

4.9 Testing and Validation

SPRINT 1

Version: 1.0 **Date: 15/02/2022**

Test #	Date	Action	Expected Result	Actual Result	Pass ? <Yes/no>
1		Registration	Registration successful	Successful	Yes
2		Login	Login to system	Login to successful	Yes

Table 4.19: Testing and Validation(Sprint1)

SPRINT 2

Version: 1.0 **Date: 15/02/2022**

Test #	Date	Action	Expected Result	Actual Result	Pass ? <Yes/no>
1		Registration	Registration successful	Successful	Yes
2		Login	Login to system	Login to successful	Yes

Table 4.20: Testing and Validation(Sprint2)

SPRINT 3

Version: 1.0 **Date: 15/02/2022**

Test #	Date	Action	Expected Result	Actual Result	Pass ? <Yes/no>
1		Development of models	Can choose the best models	Done	Yes

Table 4.21: Testing and Validation(Sprint3)

SPRINT 4

Version: 1.0 **Date: 15/02/2022**

Test #	Date	Action	Expected Result	Actual Result	Pass ? <Yes/no>
1		Development of web application	UI will be formed	Done	Yes

Table 4.22: Testing and Validation(Sprint4)

SPRINT 5

Version: 1.0 **Date: 15/02/2022**

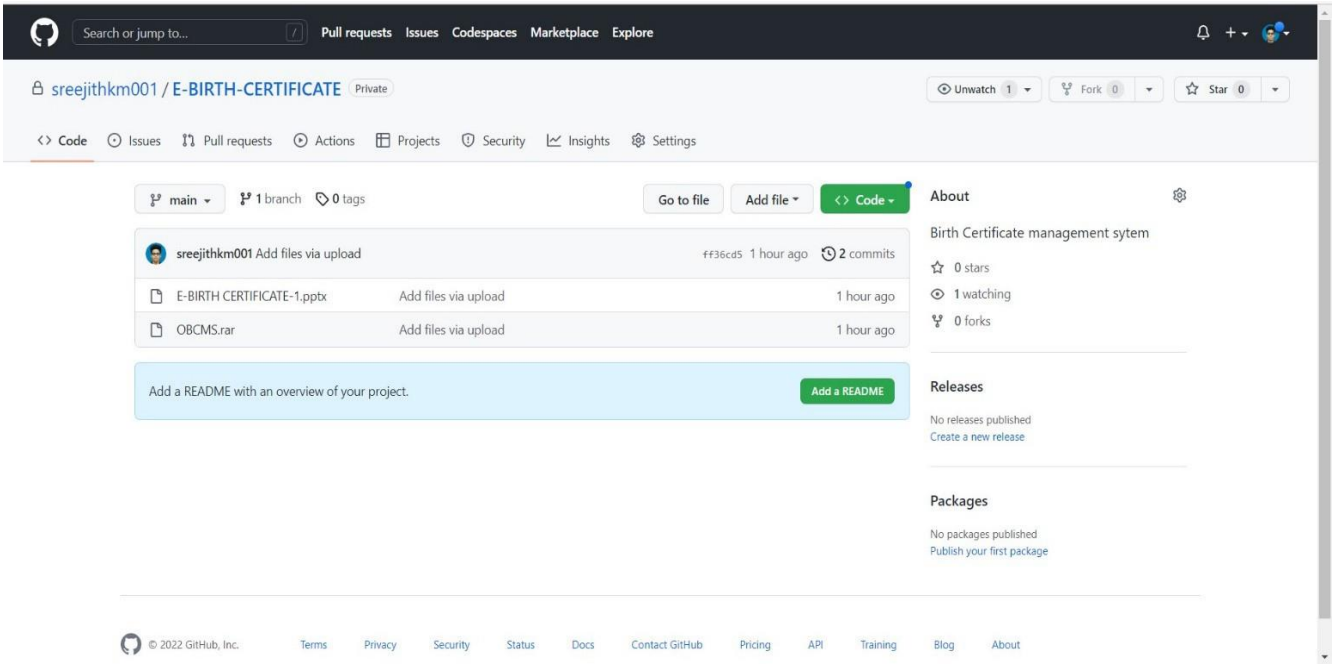
Test #	Date	Action	Expected Result	Actual Result	Pass ? <Yes/no>
1		Deployment	Booked Successfully	Done	Yes
2		Deployment	Paid Successfully	Done	Yes

Table 4.23: Testing and Validation(Sprint5)

4.10 GIT

Git is a free and open-source distributed version control system designed to handle everything from small to very large projects with speed and efficiency. To show the continuous development of the project the Git-lab histories are shown in Appendix from figure A. The Git is used as the version control system for this project. Version control is a system that records changes to a file or set of files over time so that a specific version can be recalled later. Version control systems are a category of software tools

that help a software team for managing changes to source code over time. Version control software keeps track of every modification to the code in a special kind of database. If a mistake is made, developers can turn back the clock and compare earlier versions of the code to help fix the mistake while minimizing disruption to all team members.



Chapter 5

Result And Discussions

The system provides accurate and up-to-date information on birth certificate, this system allows user to view certificate, print certificate, apply for certificate, status of the application. It notifies the system administrator about new birth certificate applications. The Admin can verify the application and give approval or rejection. This system can be used to effectively where have higher population.

System Design and Implementation and Testing

INTRODUCTION

Design concept provides the basic criteria for design quality. Design is the meaningful representation for something to build. Design focus on the three major areas of concern: Data, architecture, interface beginning once the software requirements has been analyzed and specified, software design in the first of three activities - design code generation and test. Each activities transforms information in a manner that ultimately results in validated computer software. Design is the first step in moving from the problem domain towards the solution domain. The detailed design phase. This can be achieved by:

- Input design
- Output design
- Database design

INPUT DESIGN

Input design is the process of converting user oriented input into computer based format. The goal of the design input is to make data entry as easy and free from error. In our system, we use php platform to design the forms' he input in the system is given through forms. Any surface on which information is to be entered, user interacts with the system through forms. When the data which is inputted to the system

through the system. So the designer should ensure that the form is simple, accessible and easily understandable by the user. The people who communicate with the system through user interface frequently are known as end user; the design of the input screen must be according to the specification and needs of the end users.

The specification given by the end users for this project:

- Interaction window should be user friendly
- Easy to operate
- Provide with proper validations

The form design should be clear and enough information should be provided to guide the user to enter correct data. The design decision for handling of inputs specifies how data are accepted for computer processing. The design of input also includes specifying means by which system administrator direct the system in which the action to take. The main goal of the input design to make the data entry easier, accurate and error free. Security is provided in necessary area. Input design is designed in a simple manner without any complex name, figure, confusing fields etc. proper validation for necessary fields is also provided. In the input system, data is accepted and it can be readily used for data processing and also can be stored in a database for future use. The user provided data is been processed into the computer recognizable format from this input design. The name of the input design is as follows

- Provide data to the system
- User friendly
- Avoid errors in the data
- Making the process simple

OUTPUT DESIGN

The design of output is the most important task of any system. During output design, developers identify the type of outputs needed, and consider the necessary output controls and prototype report layouts.

Objectives of Output Design

The objectives of output design are −

- To develop output design that serves the intended purpose and eliminates the production of unwanted output.
- To develop the output design that meets the end users requirements.
- To deliver To form the output in appropriate format and direct it to the right person.
- To make the output available on time for making good decisions the appropriate quantity of output.

DATABASE DESIGN

The data in the system is been stored and retrieved from database deciding the database is a part of system decide whether it is a collection of interrelated data stored with minimum redundancy save quickly and efficiently the main aim is to make database access Quick and easy. Database design of the system deals about the relevant data that come into play in the system is identified. According to the relationship of data tables are designed by allowing the standard database design method. Data type of each data is defined for the optimum design of the database to have better response time to maintain data integrity to avoid redundancy to serve many uses to quick and efficiently. The general objective is to make information access easy, quick, inexpensive and flexible for the user. Database design is the most critical path of design phase. An elegant designed, well defined database is a strong foundation for the whole system files in a relational database are called table's column of table represent data and rows represent the records in conventional technology.

SYSTEM IMPLEMENTATION AND TESTING

Implementation is a stage of theoretical design is turned into working the system. The implementation phase is used to test the development package with sample data, correcting the error identified, appearing the user of the various special facilities and features of the computerized system. It also involves the user training for minimize resistance to change and giving the new system a change to prove is worth: The successful implementation of the new system depends upon the involvement of the user.

SYSTEM IMPLEMENTATION

Implementation phase is the phase, which involves the process of converting a new system design into one operational one. It is the key stage in achieving a successful new system. Implementation is the stage of the project, where the theoretical design is turned into a working system. At this stage the main workload, the greatest upheaval and the major impact on existing practices shift to user department. If the implementation stage is not planned and controlled carefully it can cause chaos. Thus, it can be considered to be the more crucial stage in achieving a successful new stage and in giving the user confidence that the system will work and will be effective.

IMPLEMENATATION PROCEDURE

The implementation phase is less creative than system design. A system project may be dropped at any time prior to implementation although it becomes more difficult when it goes to the system phase. The final report to the implementation phase includes procedural, records layouts, reports layouts and a workable plan for implementing the candidate system. Implementation is used to the process of converting a new or revised system design into an operational one. Conversion is one aspect of implementation is unique to implementation phase.

TABLE STRUCTURE

TABLE NAME ADMIN:

S.NO	COLUMN	DATA TYPE	SIZE	CONSTRAINT	DESCRIPTION
1	Admin_id	int		Primary key	Id of admin
2	Admin Name	varchar	15	Not null	Admin Name
3	User Name	varchar	15	Not null	Username
4	Mobile No	varchar	30	Primary key	Mobile No
5	Email	varchar	15	Not null	Email
6	Password	varchar	15	Not null	Password
7	Admin Reg Date	varchar	10	Not null	Reg Date

TABLE NAME USER:

S.NO	COLUMN	DATATYPE	SIZE	CONSTRAINT	DESCRIPTION
1	UserId	int		Primary key	Id of User
2	FirstName	varchar	10	notnull	FirstName
3	LastName	varchar	10	notnull	LastName
4	MobileNo	varchar	10	notnull	MobileNo
5	Address	varchar	25	notnull	Address
6	Password	varchar	15	notnull	Password
7	RegDate	varchar	10	notnull	RegDate

TABLE NAME APPLICATION:

S.NO	COLUMN	DATATYPE	SIZE	CONSTRAINT	DESCRIPTION
1	UserId	Int		Primary key	Id of User
2	ApplicationId	Varchar	10	Notnull	ApplicationId
3	Date of Birth	Varchar	10	Notnull	Date of Birth
4	Gender	Varchar	10	Notnull	Gender
5	Full Name	Varchar	20	Notnull	Full Name
6	Place of Birth	Varchar	20	Notnull	Place of Birth
7	NameofFather	Varchar	20	Notnull	Name of Father
8	NameofMother	Varchar	20	Notnull	Name of Mother
9	PermanentAdd	Varchar	20	Notnull	Permanent Address
10	PostalAdd	Varchar	20	Notnull	Postal Address
11	MobileNo	Varchar	10	Notnull	MobileNo
12	Email	Varchar	20	Notnull	Email
13	DateofApply	Varchar	10	Notnull	Date of Apply
14	Remark	Varchar	25	Notnull	Remark
15	Status	Varchar	20	Notnull	Status
16	UpdationDate	Varchar	10	Notnull	Updation Date

5.1 DATA FLOW DIAGRAM

Data flow diagrams are used to graphically represent the flow of data in a business information system. DFD describes the processes that are involved in a system to transfer data from the input to the file storage and reports generation. Data flow diagrams can be divided into logical and physical. The logical data flow diagram describes flow of data through a system to perform certain functionality of a business. The physical data flow diagram describes the implementation of the logical data flow.

Chapter 6

Conclusion

It has been a great pleasure for us to work on this exciting and challenging project. This project proved good for us as it provided practical knowledge of programming in PHP and MYSQL server. It also provided knowledge about the latest technology used in web enabled application and client server technology that will be great demanding. This project enables the end users to register online, use and print the birth certificates. The benefits of using the online database for birth registration system cannot be over emphasized. This is because the system will increase the speed of processing birth certificates, increase accuracy in registration, eliminate cases of misplacing files of individuals and reduce the piling up of papers in the offices.

Problems of the existing system are based on the information gathered from the existing system, it showed that

The manual process of birth registration which is used in the number of problems.

1. The system is prone to errors
2. Time consuming
3. Data Security

The salient features of this system are,

- User friendly
- Database Security
- Considerable reduction in the time consumption
- Security of records
- Paperless office
- We wish our system would serve the purposes of the firm very effectively.

Future Scope

- Expanding the project in different location around the globe.
- Keep on changing Ul- Design (User Interface) to make it look attractive.
- Making servers more powerful.
- Expanding the databases for storing more customers information etc.
- Transforming this to the mobile application for better portability and making it more reliable.

BIBLIOGRAPHY

1. "Michael J. Hernandez", "Database Design for Mere Mortals", 3rd Edition
2. "Elizabeth Castro ", "HTML, XHTML, and CSS, Sixth Edition", 6th Edition
3. "L Robin Nixon ", "Earning PHP, MySQL, JavaScript, CSS & HTML5, 3rdEdition
4. Michele E. Davis, Jon A. Phillips , Learning PHP & MySQL Step-by-Step Guide to Creating Database-Driven Web Sites · 2009
5. Rasmus Lerdorf, Kevin Tatroe, Bob Kaehms, Ric McGredy, Nathan Torkington, Paula M. Ferguson , Programming PHP· 2002
6. PHP & MySQL: Novice to Ninja Get Up to Speed With PHP the Easy Way By Tom Butler, Kevin Yank · 2017
7. [Atkinson 01] Atkinson, Leon. Core PHP Programming: Using PHP to Build Dynamic Web Sites, Second Edition. Upper Saddle River, NJ: Prentice Hall PTR, 2001.
8. The system handles student as well as company data and efficiently displays all this data to respective sides https://nevonprojects.com/birth-certificate-management-system,2022,[Online: accessed September 15,2022]
9. *Online Birth-certificate Management System* is a *project* which provides an easy way for the company to hire candidates https://phpgurukul.com/birth-certificate-management-system-using-php-and mysql/ ,2022,[Online:accessed October 23,2022]

APPENDIX

Source Code

```
<?php
session_start();
error_reporting
(0);
include('includes/dbconnection.php');
if(isset($_POST['login']))
{
$mobno=$_POST['mobno'];
$password=md5($_POST['password']);
$sql ="SELECT ID FROM tbluser WHERE MobileNumber=:mobno and Password=:password";
$query=$dbh->prepare($sql);
$query->bindParam(':mobno',$mobno,PDO::PARAM_STR);
$query-> bindParam(':password', $password, PDO::PARAM_STR);
$query-> execute();
$results=$query-
>fetchAll(PDO::FETCH_OBJ);if($query-
>rowCount() > 0)
{
foreach ($results as $result) {
$_SESSION['OBCMSuid']=$result->ID;
}
$_SESSION['login']=$_POST['mobno'];
echo "<script type='text/javascript'> document.location ='dashboard.php'; </script>";
} else{
```

```
echo "<script>alert('Invalid Details');</script>";
}
}
?>
<!doctype html>
<html class="no-js" lang="en">
<head>
<title>Login | E-BIRTH CERTIFICATE</title>
<!-- Google Fonts
============================================ -->
<link href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,700,700i,800" rel="stylesheet">
<!-- Bootstrap CSS
============================================ -->
<link rel="stylesheet" href="css/bootstrap.min.css">
<!-- Bootstrap CSS
============================================ -->
<link rel="stylesheet" href="css/font-awesome.min.css">
<!-- adminpro icon CSS
============================================ -->
<link rel="stylesheet" href="css/adminpro-custon-icon.css">
============================================ -->
<link rel="stylesheet" href="css/meanmenu.min.css">
<!-- mCustomScrollbar CSS
============================================ -->
<link rel="stylesheet" href="css/jquery.mCustomScrollbar.min.css">
<!-- animate CSS
============================================ -->
```

```
<link rel="stylesheet" href="css/animate.css">
<!-- normalize CSS
============================================ -->
<link rel="stylesheet" href="css/normalize.css">
<!-- form CSS
============================================ -->
<link rel="stylesheet" href="css/form.css">
<!-- style CSS
============================================ -->
<link rel="stylesheet" href="style.css">
<!-- responsive CSS
============================================ -->
<link rel="stylesheet" href="css/responsive.css">
<!-- modernizr JS
============================================ -->
<script src="js/vendor/modernizr-2.8.3.min.js"></script>
</head>
<body class="materialdesign">
<!--[if lt IE 8]>
<p class="browserupgrade">You are using an <strong>outdated</strong> browser. Please <a
href="http://browsehappy.com/">upgrade your browser</a> to improve your experience.</p>
<![endif]-->
<!-- Header top area start-->
<div class="wrapper-pro">
<!-- login Start-->
<div class="login-form-area mg-t-30 mg-b-40">
<div class="container-fluid">
```

```
<div class="row">
<div class="col-lg-4"></div>
<form class="adminpro-form" method="post" name="login">
<div class="col-lg-4">
<div class="login-bg">
<div class="row">
<div class="col-lg-12">
<div class="logo"
<?php
session_start();
error_reporting(0)
;
include('includes/dbconnection.php');
if (strlen($_SESSION['OBCMSaid']==0)) {
header('location:logout.php');
} else{
?>
<!doctype html>
<html class="no-js" lang="en">
<head>
<title>New Application | Online Birth Certificate Management System</title>
<!-- Google Fonts
========================================= -->
<link href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,700,700i,800"
rel="stylesheet">
```

```
<!-- Bootstrap CSS
============================================ -->
<link rel="stylesheet" href="css/bootstrap.min.css">
<!-- Bootstrap CSS
============================================ -->
<link rel="stylesheet" href="css/font-awesome.min.css">
<!-- adminpro icon CSS
============================================ -->
<link rel="stylesheet" href="css/adminpro-custon-icon.css">
<!-- meanmenu icon CSS
============================================ -->
<link rel="stylesheet" href="css/meanmenu.min.css">
<!-- mCustomScrollbar CSS
============================================ -->
<link rel="stylesheet" href="css/jquery.mCustomScrollbar.min.css">
<!-- animate CSS
============================================ -->
<link rel="stylesheet" href="css/animate.css">
<!-- normalize CSS
============================================ -->
<link rel="stylesheet" href="css/data-table/bootstrap-table.css">
<link rel="stylesheet" href="css/data-table/bootstrap-editable.css">
<!-- normalize CSS
<link rel="stylesheet" href="css/normalize.css">
<!-- charts CSS
```

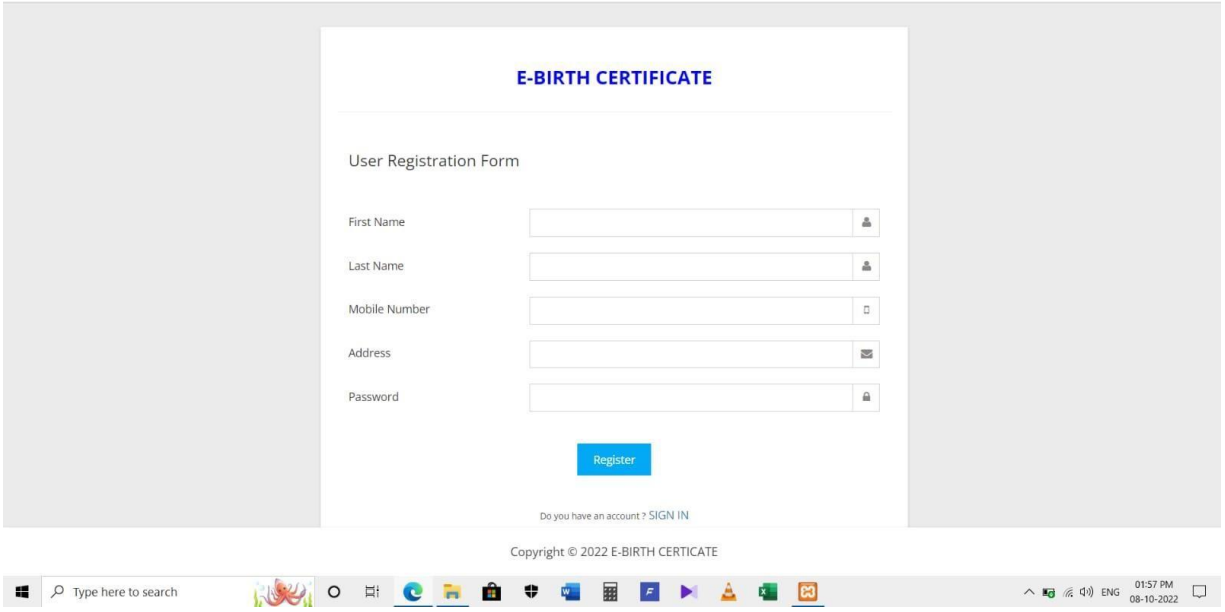
```
========================================== -->
<link rel="stylesheet" href="css/c3.min.css">
<!-- style CSS
========================================== -->
<link rel="stylesheet" href="style.css">
<!-- responsive CSS
========================================== -->
<link rel="stylesheet" href="css/responsive.css">
<!-- modernizr JS
========================================== -->
<script src="js/vendor/modernizr-2.8.3.min.js"></script>
</head>
<body class="materialdesign">
<div class="wrapper-pro">
<?php include_once('includes/sidebar.php');?>
<?php include_once('includes/header.php');?>
<!-- Breadcome start-->
<div class="breadcome-area mg-b-30 small-dn">
<div class="container-fluid">
<div class="row">
<div class="col-lg-12">
<div class="breadcome-list shadow-reset">
<div class="row">
<div class="col-lg-12">
<ul class="breadcome-menu">
<li><a href="dashboard.php">Home</a> <span class="bread-slash">/</span>
</li>
```

```
<li><span class="bread-blod">New Application</span>
 </li>
</ul>
</div>
</div>
</div>
</div>
 <?php include_once('includes/footer.php');?>
<!-- jquery
============================================ -->
<script src="js/vendor/jquery-1.11.3.min.js"></script>
<!-- bootstrap JS
============================================ -->
<script src="js/bootstrap.min.js"></script>
<!-- meanmenu JS
============================================ -->
<script src="js/jquery.meanmenu.js"></script>
<!-- mCustomScrollbar JS
============================================ -->
<script src="js/jquery.mCustomScrollbar.concat.min.js"></script>
<!-- sticky JS
============================================ -->
<script src="js/jquery.sticky.js"></script>
<!-- scrollUp JS
<script src="js/jquery.scrollUp.min.js"></script>
<!-- counterup J
```

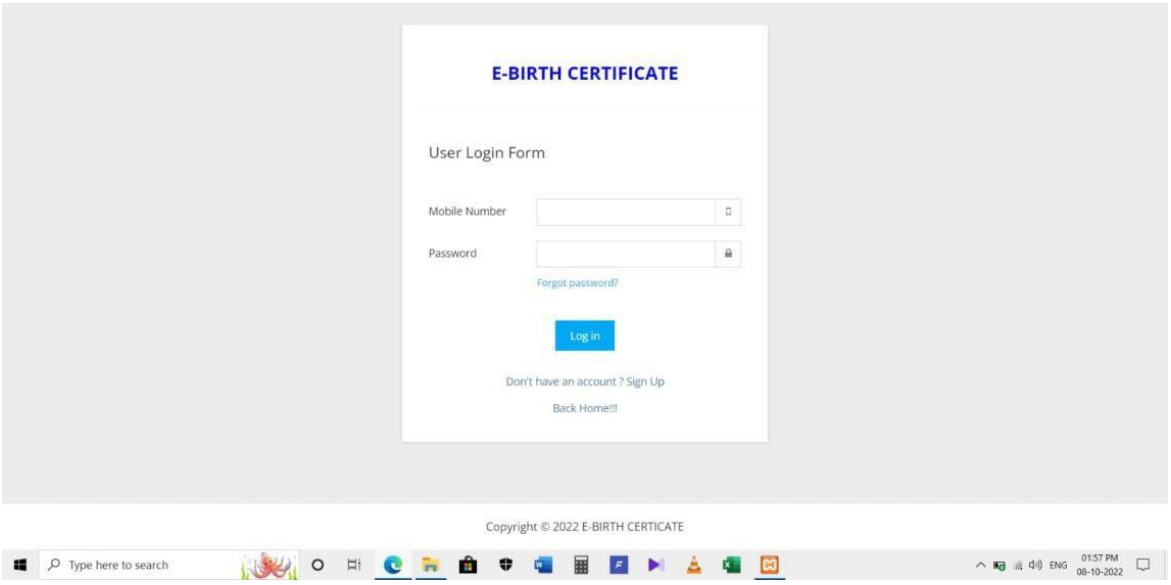
```
 <script src="js/counterup/jquery.counterup.min.js"></script>
<script src="js/counterup/waypoints.min.js"></script>
<!-- peity JS
============================================ -->
<script src="js/peity/jquery.peity.min.js"></script>
<script src="js/peity/peity-active.js"></script>
<!-- sparkline JS
============================================ -->
<script src="js/sparkline/jquery.sparkline.min.js"></script>
<script src="js/sparkline/sparkline-active.js"></script>
<!-- data table JS
============================================ -->
<script src="js/data-table/bootstrap-table.js"></script>
<script src="js/data-table/tableExport.js"></script>
<script src="js/data-table/data-table-active.js"></script>
<script src="js/data-table/bootstrap-table-editable.js"></script>
<script src="js/data-table/bootstrap-editable.js"></script>
<script src="js/data-table/bootstrap-table-resizable.js"></script>
<script src="js/data-table/colResizable-1.5.source.js"></script>
<script src="js/data-table/bootstrap-table-export.js"></script>
<!-- main JS
============================================ -->
<script src="js/main.js"></script>
</body>
</html>
<?php }  ?>
```

OUTPUT

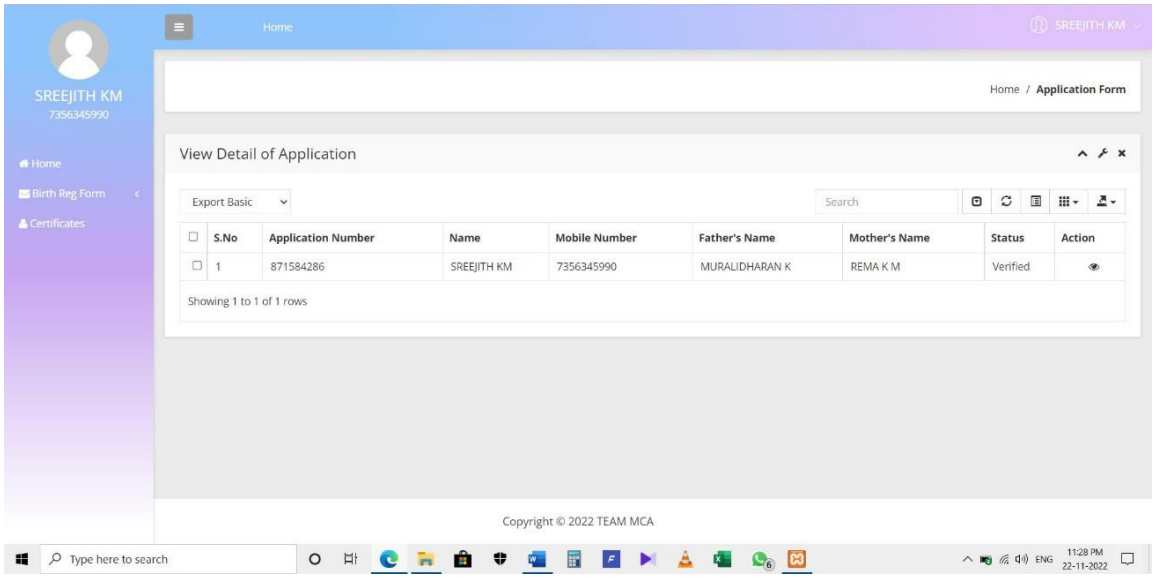
(Fig: 8.3.1 Home)



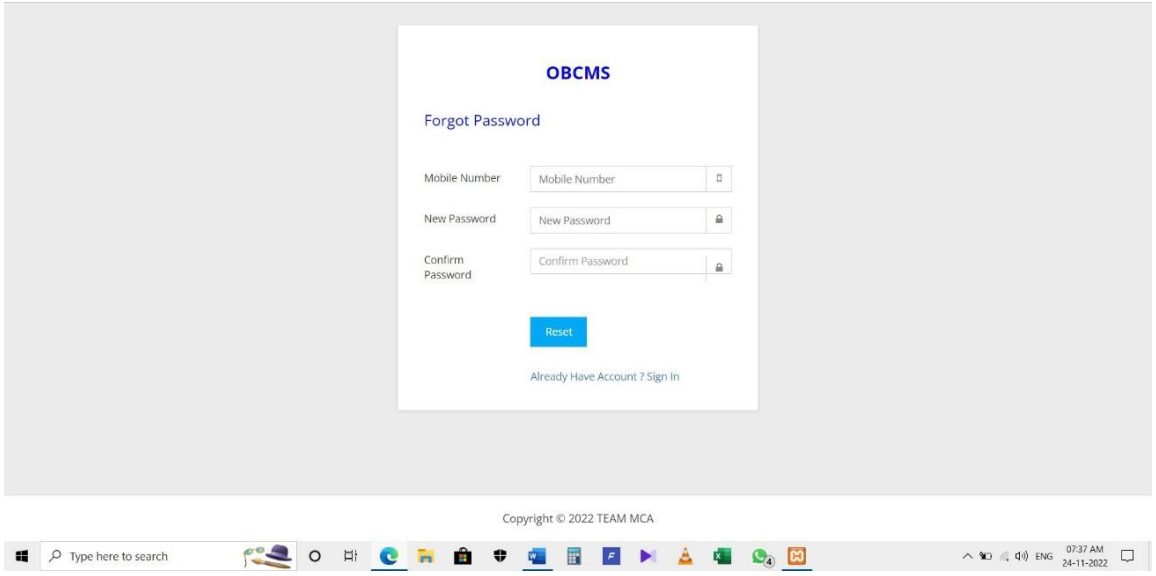
(Fig: 8.3.2 User Register)



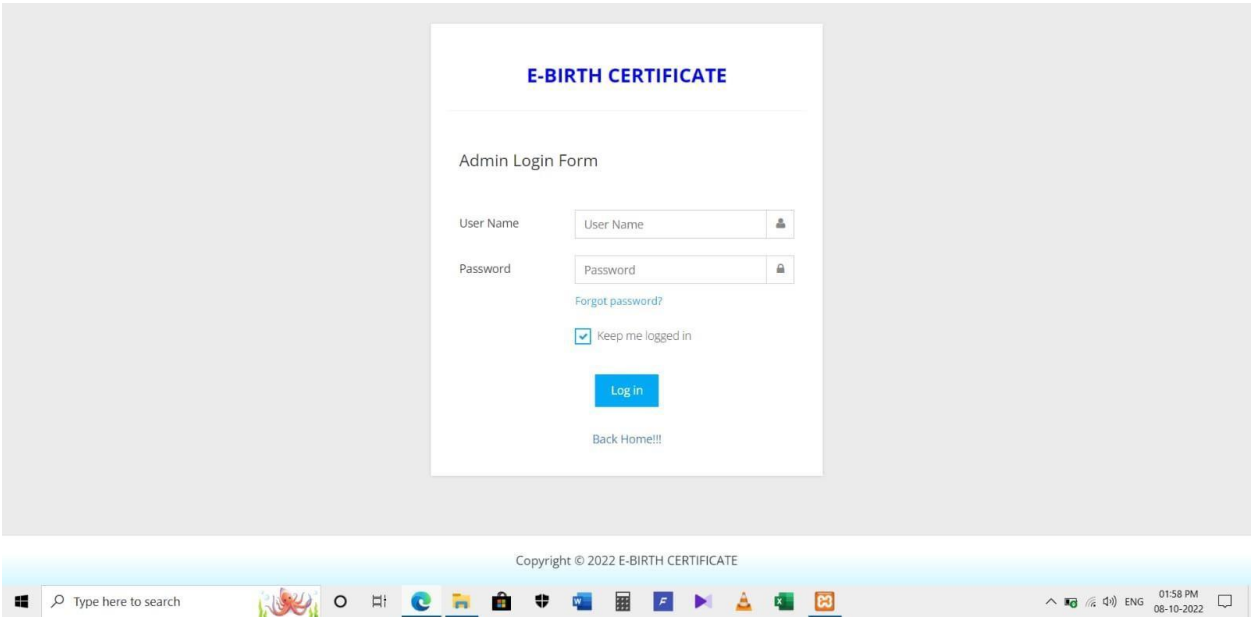
(Fig: 8.3.3 User Login)



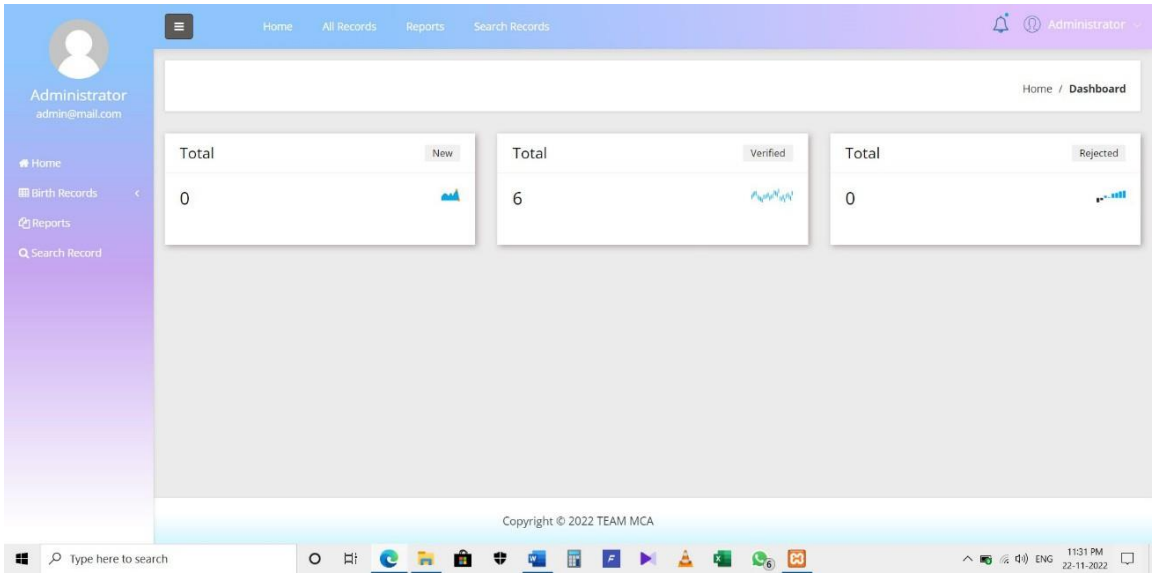
(Fig: 8.3.4 User Dashboard)



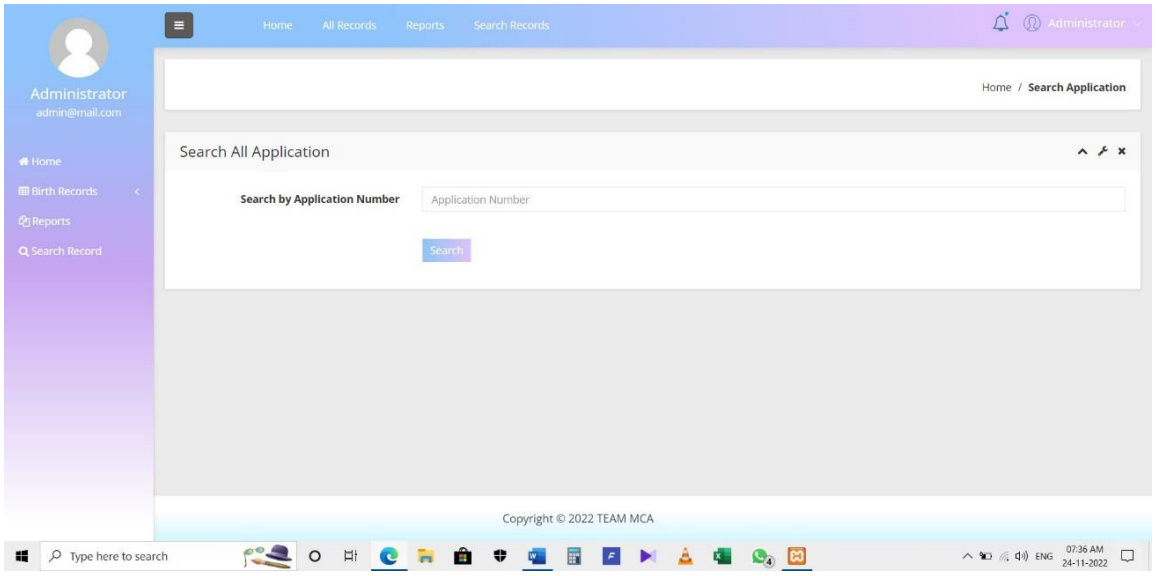
(Fig: 8.3.5 Forgot password)



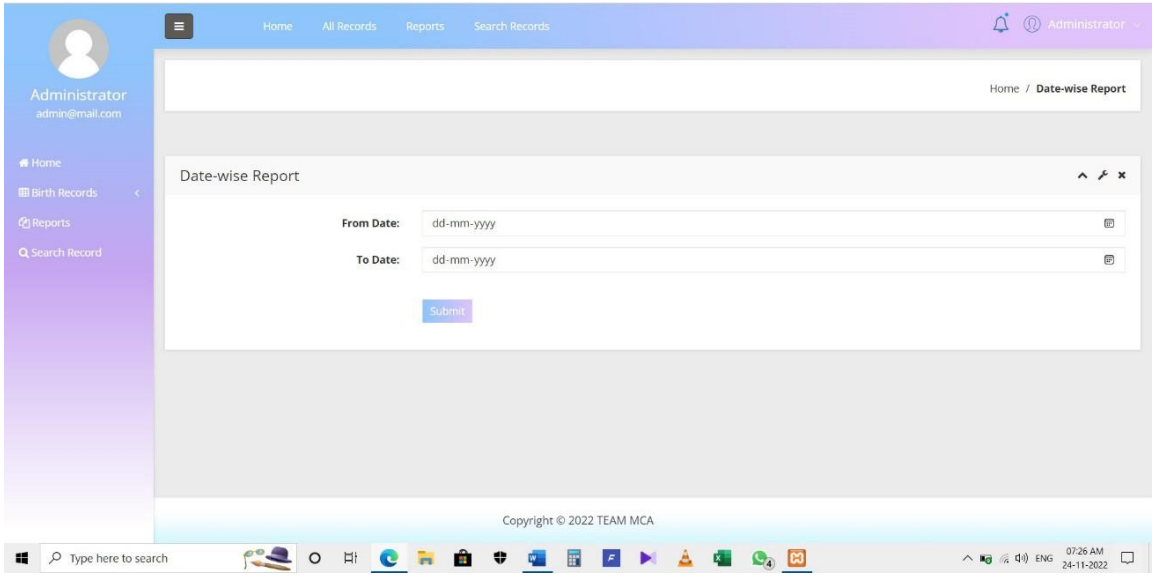
(Fig: 8.3.6 Admin login)



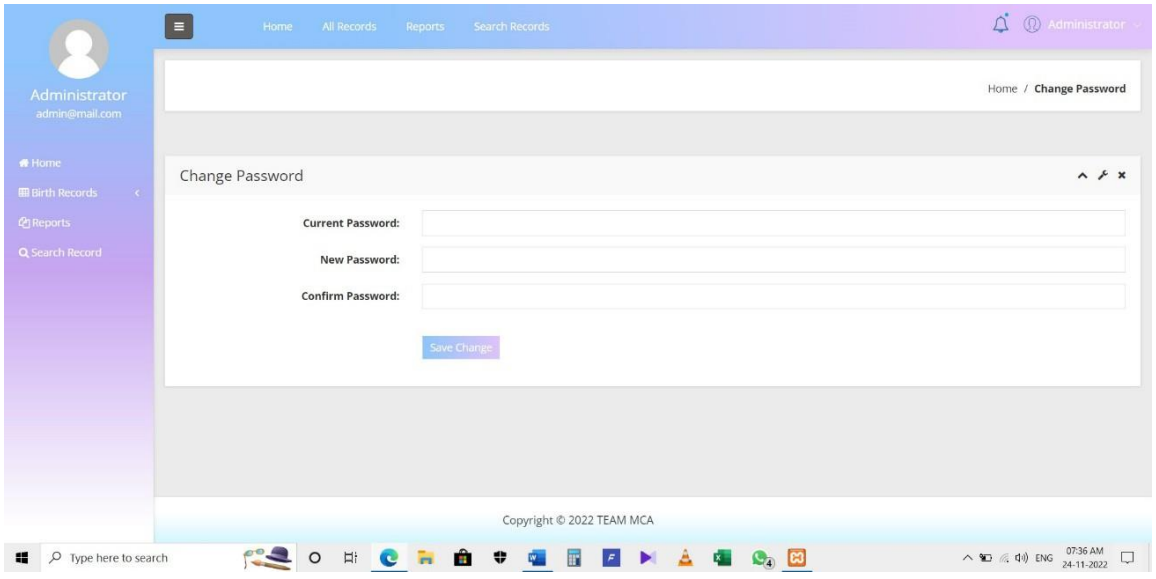
(Fig: 8.3.7 Admin Dashboard)



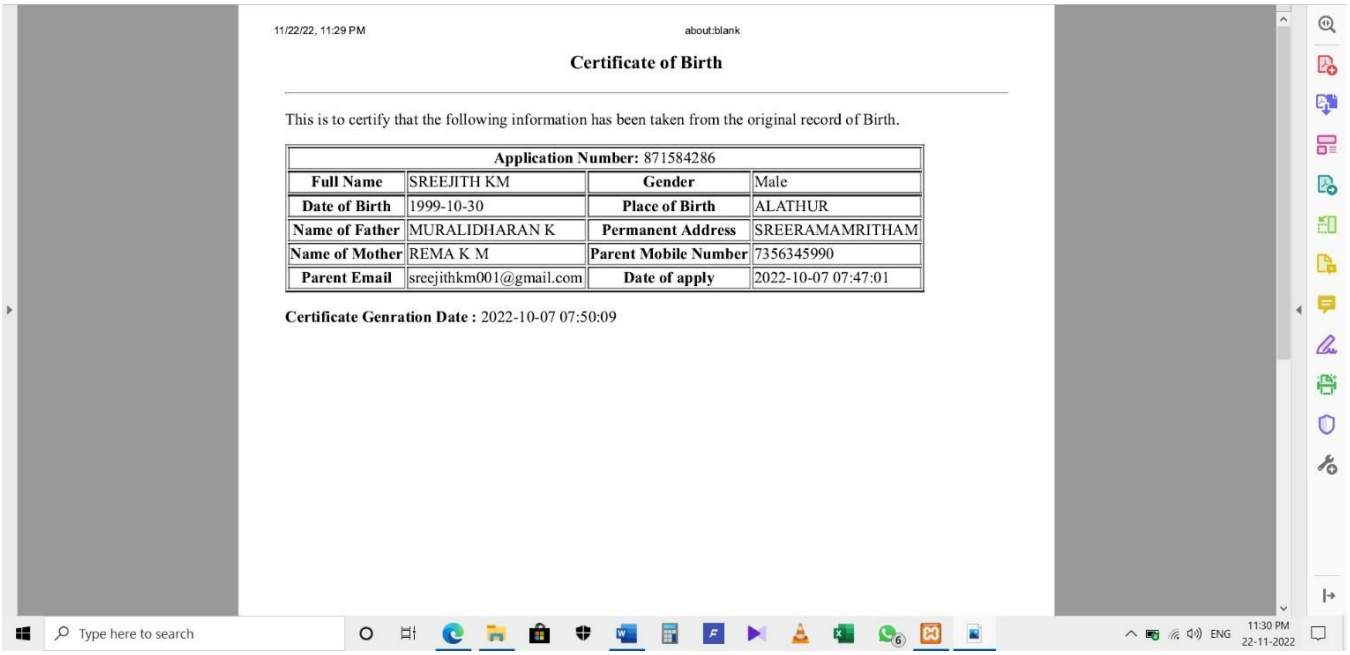
(Fig: 8.3.8 search through application number)



(Fig: 8.3.9 retrieve date wise report)



(Fig: 8.3.10 admin change password)



(Fig: 8.3.11 Certificate Demo)