

STUDENT FACE ATTENDANCE

A project work submitted to the Jamal Mohamed College (Autonomous),
Tiruchirappalli in partial fulfillment of the requirements for the award of the
degree of

MASTER OF COMPUTER APPLICATIONS

by

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PG & RESEARCH DEPARTMENT OF COMPUTER SCIENCE
JAMAL MOHAMED COLLEGE (AUTONOMOUS)

College with Potential for Excellence
Accredited (3rd Cycle) with 'A' Grade by NAAC
DBT Star College Scheme & DST-FIST Funded
(Affiliated to Bharathidasan University)
TIRUCHIRAPPALLI – 620 020

APRIL 2022

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This is to certify that this project work entitled
STUDENT FACE ATTENDANCE
is a bonafide record of the project work done

by

A. PARVES MUSHRAF
(Register No : 20MCA023)

at Jamal Mohamed College (Autonomous), Tiruchirappalli during the year 2021-2022 in
partial fulfillment of the requirements for the award of the degree of

MASTER OF COMPUTER APPLICATIONS

Dr.A.R.MOHAMED SHANAVAS
Internal Guide

Dr. G. RAVI
Head of the Department

Submitted for the Viva Voice examination held at Jamal Mohamed College,
Tiruchirappalli – 20 on _____.

Internal Examiner

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Associate Professor

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Tiruchirappalli – 620 020

CERTIFICATE

This is to certify that this project entitled **STUDENT FACE ATTENDANCE** submitted in partial fulfillment of the requirements for the award of the degree of Master of Computer Applications to the Jamal Mohamed College, Tiruchirappalli is a bonafide record of the work done by **A.PARVES MUSHRAF** (Reg.No.20MCA023) under my supervision and guidance.

Date :

Signature of the Guide



EXTAZEE SOFTWARE SOLUTION

Come Commit Complete

9 3rd Floor, ESS PEE Complex, 52, Heber Road, Cantonment, Trichy - 620 001.

DATE: 20.04.2022

INTERNSHIP ACCEPTANCE LETTER

STUDENT NAME : A. PARVES MUSHRAF
REGISTER NUMBER : 20MCA023
DEPARTMENT : MCA
COLLEGE NAME : JAMAL MOHAMED COLLEGE (AUTONOMOUS)
INTERNSHIP DURATION : APRIL 20 – JUNE 03

The above mentioned student is permitted to do internship in our company.
During the time of internship, the student should follow the rules and regulations of the company. We would like to inform the student to use the provided opportunity in the best way.

Managing Director

(ARUN RAJ)

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My sincere thanks to **Dr. S. Ismail Mohideen, M.Sc., M.Phil. PGDCA., Ph.D.**, Principal, Jamal Mohamed College, Tiruchirappalli who provided this opportunity and for his catalytic and constant encouragement.

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As the pole star guides every lonely traveller with assurance and safety, so has our guide, we extend our Sincere thanks. **Dr.A.R.Mohamed Shanavas Associate Professor**, for all his guidance, encouragement, motivation and inspiration that enabled us to shine in every walk of life.

At the outset we wish to convey our sincere thanks to the staff members of Computer Science Department and all our friends who guided in our endeavor.

A. Parves Mushraf

ABSTRACT

Face detection technology has widely attracted attention due to its enormous application value and market potential, such as face recognition and video surveillance system. Real-time face detection not only is one part of the automatic face recognition system but also is developing an independent research subject. So, there are many approaches to solve face detection. This project introduces a new approach in automatic attendance management systems, extended with computer vision algorithms. Here the student attendance is detected with a face attendance system used with machine learning testing and the training phase. The training phase stores out the student face details and the testing phase shown out with the identification of the student attendance. The main solving agent in this project is student may leave the class after placing the attendance. Here the system shows out the exact module on complete present inside the classroom for the entire class hours. If they leave the classroom then the attendance can be marked as half attendance for that period of verification. Thus the proposed system is done with RNN matching and classification system to classify the student face one from the other. he system represents a supplemental tool for instructors, combining algorithms used in machine learning with adaptive methods used to track facial changes during a longer period of time. This new system aims to be less time consuming than traditional methods, at the same time being nonintrusive and not interfere with the regular teaching process. The tool promises to offer accurate results and a more detailed reporting system which shows student activity and attendance in a classroom.

Front End: Python

Back End: MySQL

MODULES:

Staff

- Login
- Train student face
- Make attendance
- View attendance
- Student face trained
- Face classification
- Periodic Attendance

CONTENTS

Chapter 1: Introduction	Page No
1.1 PROBLEM DEFINITION	01
1.2 COMPANY PROFILE	
Chapter 2: Problem Description	04
Chapter 3: System Study	
3.1. EXISTING SYSTEM	
3.1.1. Drawbacks of the Existing System	
3.2. PROPOSED SYSTEM	
3.2.1. Advantages of Proposed System	
3.3. NEED FOR COMPUTERIZATION	05
3.4. DATA FLOW DIAGRAM	
3.4.1. Level 0	
3.4.2. Level 1	
3.5. DATA DICTIONARY	
Chapter 4: System Configuration	
4.1. HARDWARE REQUIREMENTS	11
4.2. SOFTWARE REQUIREMENTS	

Chapter 5: Overview of The Software

5.1. FRONT END (Python)

5.1.1. Features in Python

5.1.2. Software Supports

5.1.3. Prerequisites

12

5.1.4. Python Installation on Windows

5.2. BACK END (Wamp Server)

5.2.1. Inter Images

5.2.2. Graphical

5.2.3. Command Line

5.2.4. Features

Chapter 6: Design and Development

6.1. ARCHITECTURAL DESIGN

6.2. DATABASE DESIGN

26

6.3. INPUT AND OUTPUT DESIGN

6.4. OUTPUT DESIGN

Chapter 7: Implementation and Testing

7.1. IMPLEMENTATION

33

7.2. TESTING

Chapter 8: Conclusion	39
------------------------------	-----------

Chapter 9: Bibliography	40
--------------------------------	-----------

RESULT AND CONCLUSION

1. Annexure	41
--------------------	-----------

1.1. Source Code

1.2. Screenshots	98
------------------	-----------

1. INTRODUCTION

1.1 PROBLEM DEFINITION

Face recognition is crucial in daily life in order to identify family, friends or someone we are familiar with. We might not perceive that several steps have actually taken in order to identify human faces. Human intelligence allows us to receive information and interpret the information in the recognition process. We receive information through the image projected into our eyes, by specifically retina in the form of light. Light is a form of electromagnetic waves which are radiated from a source onto an object and projected to human vision. The visual processing done by the human visual system, we actually classify shape, size, contour and the texture of the object in order to analyze the information. The analyzed information will be compared to other representations of objects or face that exist in our memory to recognize. In fact, it is a hard challenge to build an automated system to have the same capability as a human to recognize faces. However, we need large memory to recognize different faces, for example, in the Universities, there are a lot of students with different race and gender, it is impossible to remember every face of the individual without making mistakes. In order to overcome human limitations, computers with almost limitless memory, high processing speed and power are used in face recognition systems.

1.2 COMPANY PROFILE

Extazee Software Solution is a novel class of Software Company. This company is started by folks who have a passion to make innovations in the academic projects for students. The professionals who work here have more than 8 years of experience in various fields. Our software development team strives to develop innovative software that meets the students' needs.

We assist students of CSE stream (primarily) to bring out their innovative ideas into reality. Internships and In – Plant Training are available with us. At the time of internships and IPTs, students are trained and are given assignments for improving their technical skills. We are initially starting with the core technological streams. Students can enrich their inter personal skills by attending mock interviews and group discussions. We are planning to conduct soft skills programs and personality development programs at the end of even semesters.

Recent trending research papers of various journals are explained to students. The proposed methods are executed through the latest technologies that are suitable for project and comfortable for students. We want to achieve both employees' satisfaction and students' satisfaction. We always follow ethics in all our mechanisms.

OUR SERVICES

Our Company furnishes projects based on Website Designing, Web Application Development, Network Security and Mobile Applications. We also do Real Time Projects. We train final year students to complete their academic projects. Our company suits for students of CSE Department. These projects are completed within the allocated time bound. They are also cost effective and add value for students to survive in the technology innovative environment which requires specialized domain expertise. We follow professional ethics in all aspects.

Extazee Software Solution offers Internship programs to students and budding engineers. We give concession when more number of students from the same college joins for the internship course. In Plant Training is available for BE/ B.Tech/ BCA/ MCA/ BSC/ MSC and also for Diploma students. We have professional experts who can train students and fresher on soft skills. Communication, Interpersonal skills, Teamwork and Work ethics are few topics from the list of topics available. We are specialized in academic and real time projects. Web Designing, Web Development, Network Security, Mobile App Development, Image Processing and Big Data are a few to name from many of the services we provide.

We design & develop step by step app development with lots of iterations on wire frame and mocks to keep your idea in-line with our app team. We can develop the fully functional app for your idea/ business.

We concentrate mainly in Quality of our output by listening to the customer's requirement. When the requirements are crystal clear to us, we can definitely provide quality service to our clients. So we listen to our clients requirements clearly to give good solutions to them. We are very enthusiastic with our work and deliver business more than their expectations and brilliant up-to-date web solutions. We pride ourselves to be one of the best website design company as we recognize our client needs and deliver unique and professional web designing services. Unlike many web design companies we do not solely focus on work of art but passionate about user experience and return of investment (ROI) too.

We have experienced professionals for software creation and development. They develop and assist projects for both educational and corporate sectors. Internship is the position of a student who works in an organization without pay, in order to gain work experience or satisfy requirements for a qualification. We provide internship and In – Plant Training for students and trainees. Our aim is to provide what we have promised. We have short courses in the disciplines of CSE stream, enabling the students to learn alongside their studies, ensuring their skills are completely updated.

CHAPTER 2

PROBLEM DESCRIPTION

The success of an educational institute begins by engaging students and having regular attendance of students. Having a higher attendance score results in higher marks, higher retention rates, and a better educational experience. It is difficult for teachers and students to build a strong relationship if students are frequently absent. This hampers teachers and students to develop their skills and make progression. In many schools, the school budgets are based on the average daily attendance of the school. If the attendance rates are low, then school budgets suffer. Hence, schools have less money to get essential classroom needs for students and eventually end up with less quality education. Therefore, the educational institute needs to have high-quality attendance data. These data provide essential information for the institute to formulate policies, programs, and practices to improve attendance rates. To increase the attendance of students, many teachers give better grades to the students with higher attendance scores.

Face detection is more challenging because of some unstable characteristics, for example, glasses and beard will impact the detecting effectiveness. Moreover, different kinds and angles of lighting will make detecting face generate uneven brightness on the face, which will have an influence on the detection process. An intensive study of OpenCV platform and its inbuilt libraries has been conducted to generate a code, which does correct and reliable facial recognition with new and efficient use of hardware.

CHAPTER 3

SYSTEM STUDY

3.1 EXISTING SYSTEM

Currently manual student attendance marking technique is often facing a lot issues and a very slow process. Teacher's or faculty calling names of student from their data sheet and student responding to them. But this existing process becomes very complex in large classes that consists so many students. Many times, students also mark proxies by responding to fake name. This makes disturbance in class and distracts the students during the exam times. Also, verifying the total students present by counting them after attendance, which takes a lot of time consuming Apart from calling names attendance sheet is passed around classroom during lectures especially the classes consisting large number of students might find it hard to have attendance sheet being passed around the class.

3.1.1 Drawbacks of the Existing System

- Traditional student attendance marking technique is often facing a lot of trouble.
- There are not only disturbing the teaching process but also causes distraction for students during exam sessions.
- Apart from calling names, attendance sheet is passed around the classroom during the lecture sessions.

3.2 PROPOSED SYSTEM

The face recognition student attendance system emphasizes its simplicity by removing classical attendance marking technique such as calling the students name or checking their respective ID Cards. Thus, attendance system through facial recognition is proposed in order to replace the manual marking of student's attendance. Furthermore, the automated attendance system based on face recognition is able to overcome the problems of fraudulent approach and faculty does not have to count the number of students several time to verify the presence of students. The proposed framework uses OpenCV library. It is an Open-Source Computer Vision Library that is free for both scholastic and business use. Face recognition-based attendance system

proposes that the system is based on face detection and recognition algorithms, which automatically detects and recognizes the face and when student enters the class. There are various algorithms which have been made to detect the human face. When it is compared to existing attendance marking technique this system is much accurate and less time consuming.

3.2.1 Advantages of Proposed System

- When it is compared to existing attendance marking technique this system is much accurate and less time consuming.
- Tracking and marking student attendance by facial recognition in specific time.
- Showing the names of students with the exact time stamp i.e., exact time of entering the class.





3.3 NEED FOR COMPUTERIZATION

Every organization requires a robust and stable system to record the attendance of their student. and every organization have their own method to do so, some are taking attendance manually with a sheet of paper by making a sign in their attendance record and some have adopted biometrics system such as fingerprint, RFID card reader, Iris system to mark the attendance. The conventional method of making student manually is time consuming event. So, the problem arises when we think about the traditional process of taking attendance in the classroom. To solve all these issues we go with Automatic Attendance System (AAS) with face recognition is done.

3.4 DATA FLOW DIAGRAM

A two-dimensional diagram explains how data is processed and transferred in a system. The graphical depiction identifies each source of data and how it interacts with other data sources to reach a common output. Individuals seeking to draft a data flow diagram must identify external inputs and outputs, determine how the inputs and outputs relate to each other, and explain with graphics how these connections relate and what they result in. This type of diagram helps business development and design teams visualize how data is processed and identify or improve certain aspects.

Data flow Symbols:

Symbol	Description
	An entity . A source of data or a destination for data.
	A process or task that is performed by the system.
	A data store , a place where data is held between processes.
	A data flow .

LEVEL 0

DFD Level 0 is also called a Context Diagram. It's a basic overview of the whole system or process being analyzed or modeled. It's designed to be an at-a-glance view, showing the system as a single high-level process, with its relationship to external entities. It should be easily understood by a wide audience, including stakeholders, business analysts, data analysts and developers.

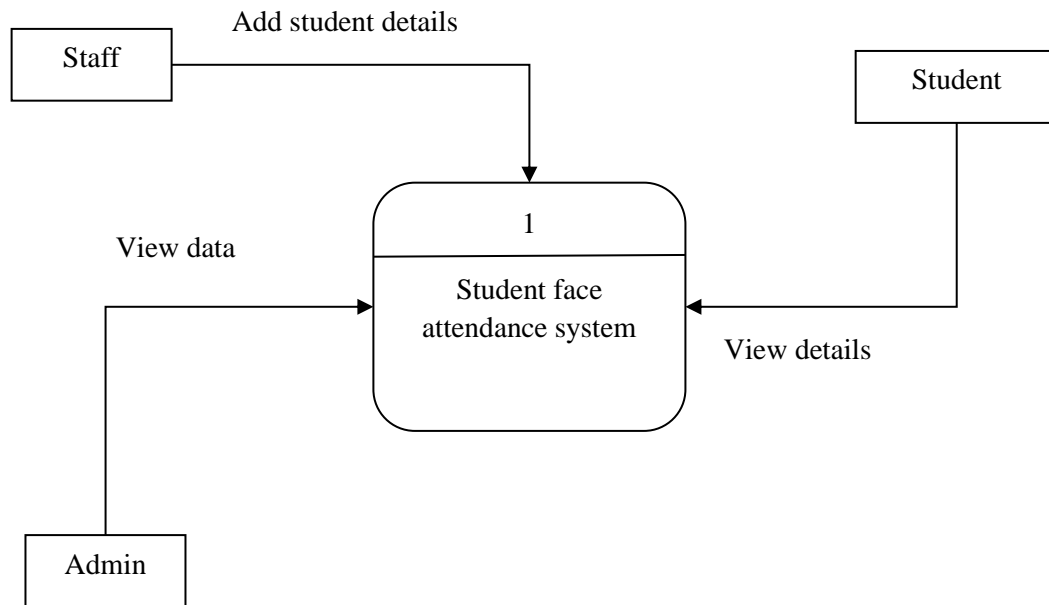
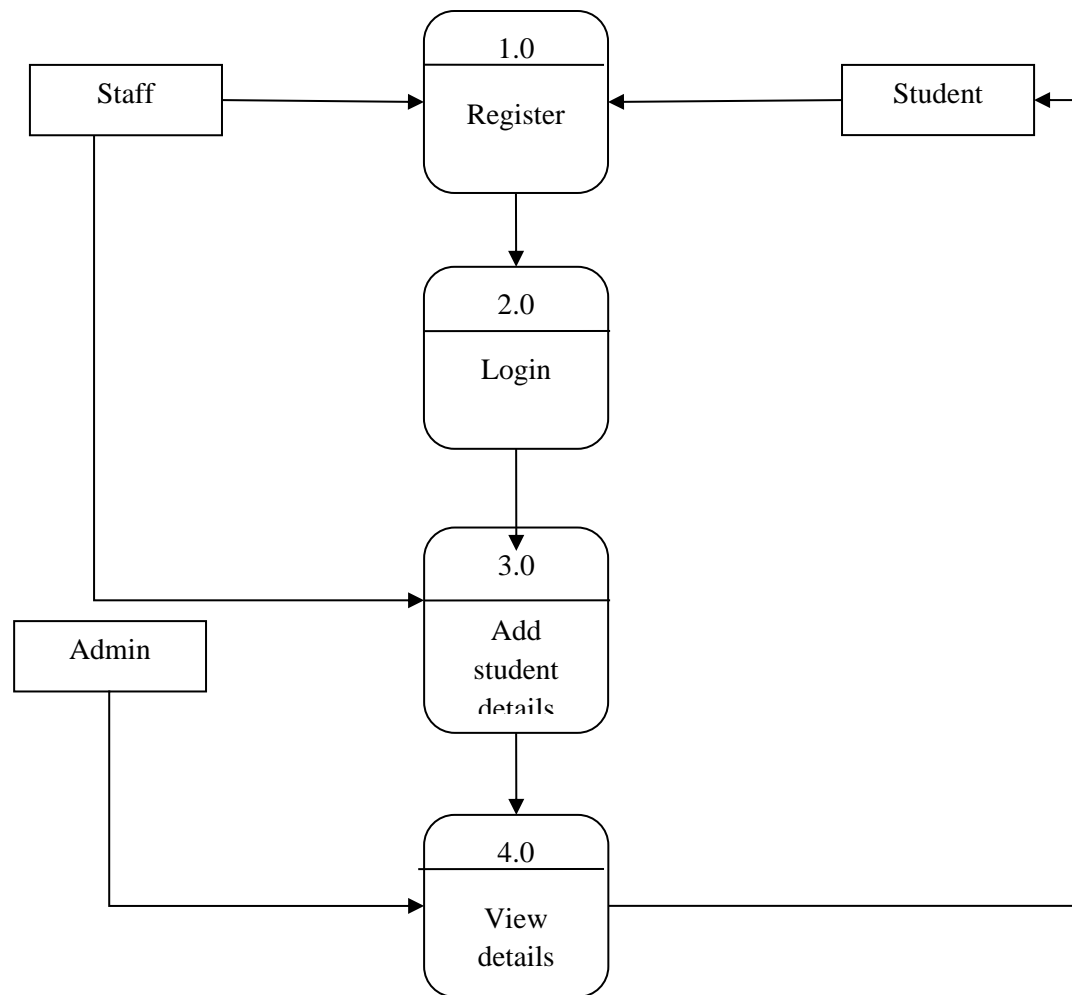


Fig 2.1.1 level 0 DFD

LEVEL 1

DFD Level 1 provides a more detailed breakout of pieces of the Context Level Diagram. You will highlight the main functions carried out by the system, as you break down the high-level process of the Context Diagram into its sub – processes. A level 1 data flow diagram (DFD) is more detailed than a level 0 DFD but not as detailed as a level 2 DFD. It breaks down the main processes into sub processes that can then be analyzed and improved on a more intimate level.



3.5 DATA DICTIONARY

Staff Details table

Field	Type	Description	Example
id	int(100)	Id of the staff	12
name	varchar(100)	Name of the staff	Rose
department	varchar(100)	Department of the staff	CS
qualification	varchar(100)	Qualification of the staff	M.Phil
experience	varchar(100)	Experience of the staff	10

position	varchar(100)	Position of the staff	Associate Professor
contact	varchar(100)	Contact of the staff	7485961230
email	varchar(100)	Email of the staff	rose@gmail.com
year_join	varchar(100)	Year of joining	2002

Student details

Field	Type	Description	Example
id	int(100)	Id of the student	17
sname	varchar(100)	Student name	Parves
regno	varchar(100)	Register number of the student	811214104010
dept	varchar(100)	Department of the student	MCA
month	varchar(100)	Month of the student	June
totalpresent	varchar(100)	Total present	15
totalabsent	varchar(100)	Total absent	15
percentage	varchar(100)	Total percentage	50%

CHAPTER 4

SYSTEM CONFIGURATION

4.1 HARDWARE REQUIREMENTS

- Processor : Dual core processor 2.6.0 GHz
- RAM : 1GB
- Hard disk : 160 GB
- Compact Disk : 650 MB
- Keyboard : Standard keyboard
- Monitor : 15 inch color monitor

4.2 SOFTWARE REQUIREMENTS

- Front End : PYTHON
- MySQL : MySQL
- IDE : Pycharm
- Platform : Windows 7

CHAPTER 5

OVERVIEW OF THE SOFTWARE

5.1 FRONT END (Python):

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. Its high-level built in data structures, combined with dynamic typing and dynamic binding, make it very attractive for Rapid Application Development, as well as for use as a scripting or glue language to connect existing components together. Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python supports modules and packages, which encourages program modularity and code reuse. The Python interpreter and the extensive standard library are available in source or binary form without charge for all major platforms, and can be freely distributed.

Often, programmers fall in love with Python because of the increased productivity it provides. Since there is no compilation step, the edit-test-debug cycle is incredibly fast. Debugging Python programs is easy: a bug or bad input will never cause a segmentation fault. Instead, when the interpreter discovers an error, it raises an exception. When the program doesn't catch the exception, the interpreter prints a stack trace. A source level debugger allows inspection of local and global variables, evaluation of arbitrary expressions, setting breakpoints, stepping through the code a line at a time, and so on. The debugger is written in Python itself, testifying to Python's introspective power. On the other hand, often the quickest way to debug a program is to add a few print statements to the source: the fast edit-test-debug cycle makes this simple approach very effective.

5.2 FEATURES IN PYTHON

There are many features in Python, some of which are discussed below –

1. Easy to code:

Python is high level programming language. Python is very easy to learn language as compared to other language like c, c#, java script, javaetc.It is very easy to code in python language and anybody can learn python basic in few hours or days.It is also developer-friendly language.

2. Free and Open Source:

Python language is freely available at official website and you can download it from the given download link below click on the Download Python keyword.

Download Python

Since, it is open-source; this means that source code is also available to the public. So you can download it as, use it as well as share it.

3. Object-Oriented Language:

One of the key features of python is Object-Oriented programming. Python supports object oriented language and concepts of classes, objects encapsulation etc.

4. GUI Programming Support:

Graphical Users interfaces can be made using a module such as PyQt5, PyQt4, wxPython or Tk in python.

PyQt5 is the most popular option for creating graphical apps with Python.

5. High-Level Language:

Python is a high-level language. When we write programs in python, we do not need to remember the system architecture, nor do we need to manage the memory.

6. Extensible feature:

Python is a Extensible language. we can write our some python code into c or c++ language and also we can compile that code in c/c++ language.

7. Python is Portable language:

Python language is also a portable language. for example, if we have python code for windows and if we want to run this code on other platform such as Linux, Unix and Mac then we do not need to change it, we can run this code on any platform.

8. Python is integrated language:

Python is also an integrated language because we can easily integrated python with other language like c, c++ etc.

9. Interpreted Language:

Python is an Interpreted Language. because python code is executed line by line at a time. like other language c, c++, java etc there is no need to compile python code this makes it easier to debug our code. The source code of python is converted into an immediate form called bytecode.

10. Large Standard Library:

Python has a large standard library which provides rich set of module and functions so you do not have to write your own code for every single thing. There are many libraries present in python for such as regular expressions, unit-testing, web browsers etc.

11. Dynamically Typed Language:

Python is dynamically-typed language. That means the type (for example- int, double, long etc) for a variable is decided at run time not in advance. because of this feature we don't need to specify the type of variable.

Machine Learning is the hottest trend in modern times. According to Forbes, Machine learning patents grew at a 34% rate between 2013 and 2017 and this is only set to increase in the future. And Python is the primary programming language used for much of the research and

development in Machine Learning. Python is currently the most popular programming language for research and development in Machine Learning. But you don't need to take my word for it! According to GoogleTrends, the interest in Python for Machine Learning has spiked to an all-new high with other ML languages such as R, Java, Scala, Julia, etc. lagging far behind.

SOFTWARE SUPPORTS

INSTALLATION PROCEDURE

Introduction

Python is a widely used high-level programming language first launched in 1991. Since then, Python has been gaining popularity and is considered as one of the most popular and flexible server-side programming languages.

Unlike most Linux distributions, Windows does not come with the Python programming language by default. However, you can install Python on your Windows server or local machine in just a few easy steps.

PREREQUISITES

- A system running Windows 10 with admin privileges
- Command Prompt (comes with Windows by default)
- A Remote Desktop Connection app (use if you are installing Python on a remote Windows server)

PYTHON INSTALLATION ON WINDOWS

Step 1: Select Version of Python to Install

The installation procedure involves downloading the official Python .exe installer and running it on your system.

The version you need depends on what you want to do in Python. For example, if you are working on a project coded in Python version 2.6, you probably need that version. If you are starting a project from scratch, you have the freedom to choose.

If you are learning to code in Python, we recommend you **download both the latest version of Python 2 and 3**. Working with Python 2 enables you to work on older projects or test new projects for backward compatibility.

Step 2: Download Python Executable Installer

1. Open your web browser and navigate to the [Downloads for Windows section](#) of the [official Python website](#).
2. Search for your desired version of Python. At the time of publishing this article, the latest Python 3 release is version 3.7.3, while the latest Python 2 release is version 2.7.16.
3. Select a link to download either the **Windows x86-64 executable installer** or **Windows x86 executable installer**. The download is approximately 25MB.

Python »» Downloads »» Windows

Python Releases for Windows

- [Latest Python 3 Release - Python 3.7.3](#)
- [Latest Python 2 Release - Python 2.7.16](#)

Stable Releases

- [Python 3.7.3 - March 25, 2019](#)
Note that Python 3.7.3 cannot be used on Windows XP or earlier.
 - [Download Windows help file](#)
 - [Download Windows x86-64 embeddable zip file](#)
 - [Download Windows x86-64 executable installer](#)
 - [Download Windows x86-64 web-based installer](#)
 - [Download Windows x86 embeddable zip file](#)
 - [Download Windows x86 executable installer](#)
 - [Download Windows x86 web-based installer](#)
- [Python 3.4.10 - March 18, 2019](#)
 - No files for this release.
- [Python 3.5.7 - March 18, 2019](#)
Note that Python 3.5.7 cannot be used on Windows XP or earlier.
 - No files for this release.
- [Python 2.7.16 - March 4, 2019](#)

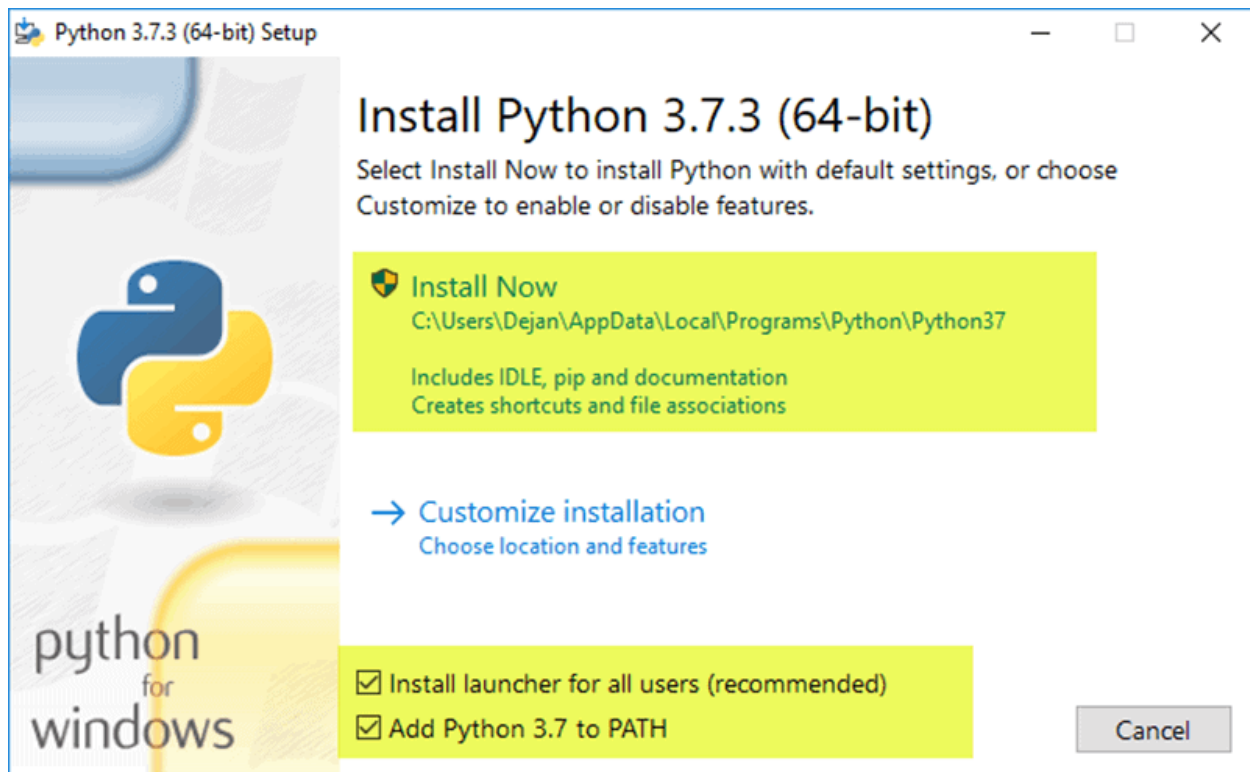
Pre-releases

- [Python 3.8.0a3 - March 25, 2019](#)
 - [Download Windows help file](#)
 - [Download Windows x86-64 embeddable zip file](#)
 - [Download Windows x86-64 executable installer](#)
 - [Download Windows x86-64 web-based installer](#)
 - [Download Windows x86 embeddable zip file](#)
 - [Download Windows x86 executable installer](#)
 - [Download Windows x86 web-based installer](#)
- [Python 3.7.3rc1 - March 12, 2019](#)
 - [Download Windows help file](#)
 - [Download Windows x86-64 embeddable zip file](#)
 - [Download Windows x86-64 executable installer](#)
 - [Download Windows x86-64 web-based installer](#)
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 - [Download Windows x86 executable installer](#)
 - [Download Windows x86 web-based installer](#)

python-3.7.3-amd64.exe

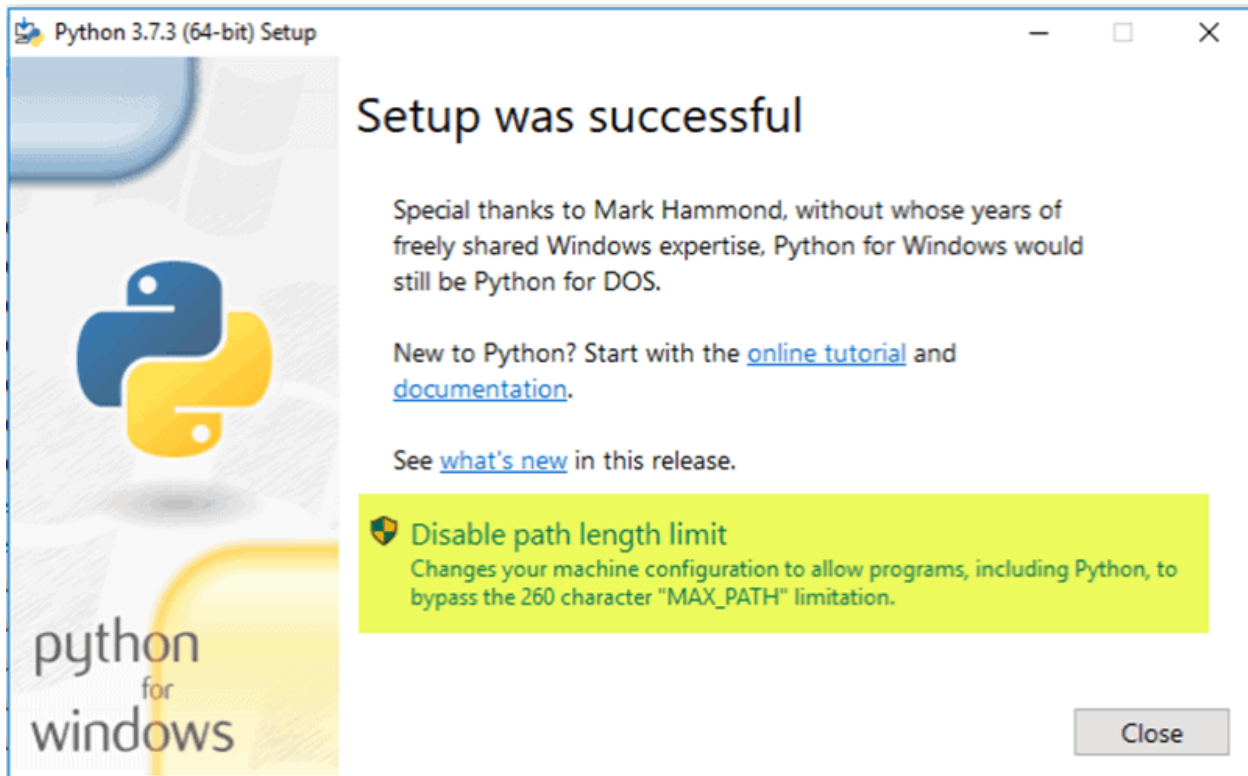
Step 3: Run Executable Installer

1. Run the **Python Installer** once downloaded. (In this example, we have downloaded Python 3.7.3.)
2. Make sure you select the **Install launcher for all users** and **Add Python 3.7 to PATH** checkboxes. The latter places the interpreter in the execution path. For older versions of Python that do not support the **Add Python to Path** checkbox, see [Step 6](#).
3. Select **Install Now** – the recommended installation options.



For all recent versions of Python, the recommended installation options include **Pip** and **IDLE**. Older versions might not include such additional features.

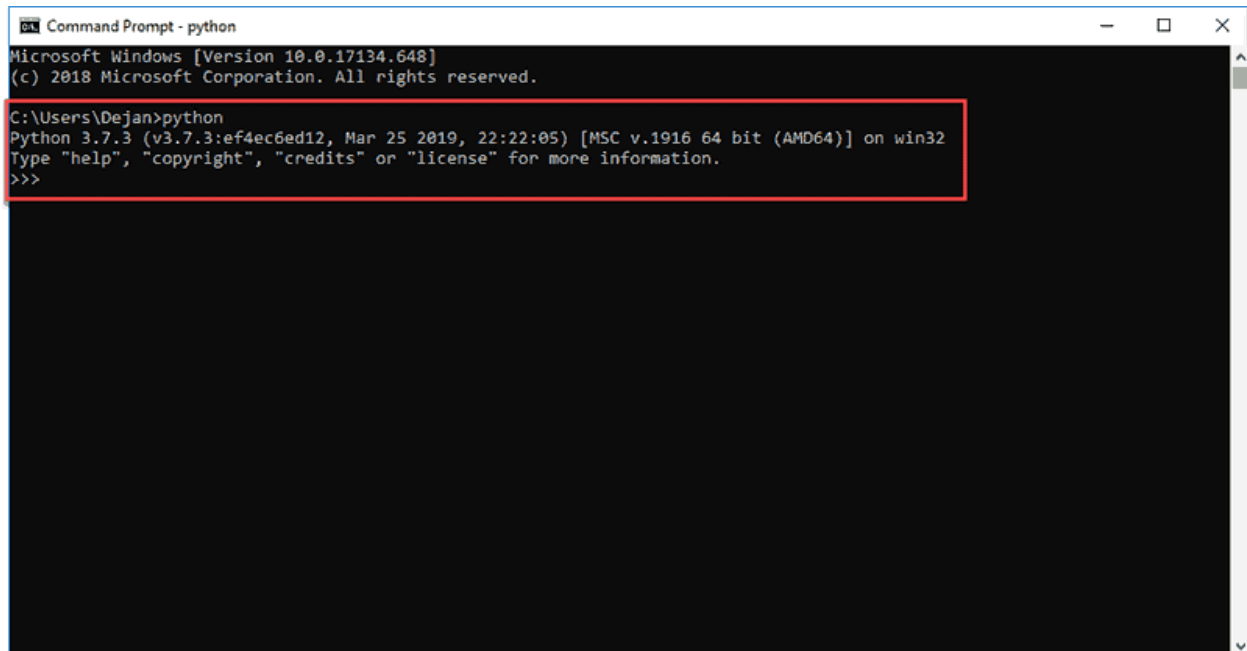
4. The next dialog will prompt you to select whether to **Disable path length limit**. Choosing this option will allow Python to bypass the 260-character MAX_PATH limit. Effectively, it will enable Python to use long path names



The Disable path length limit option will not affect any other system settings. Turning it on will resolve potential name length issues that may arise with Python projects developed in Linux.

Step 4: Verify Python Was Installed On Windows

1. Navigate to the directory in which Python was installed on the system. In our case, it is **C:\Users\Username\AppData\Local\Programs\Python\Python37** since we have installed the latest version.
2. Double-click **python.exe**.
3. The output should be similar to what you can see below:



```
Command Prompt - python
Microsoft Windows [Version 10.0.17134.648]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\Dejan>python
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 22:22:05) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>>
```

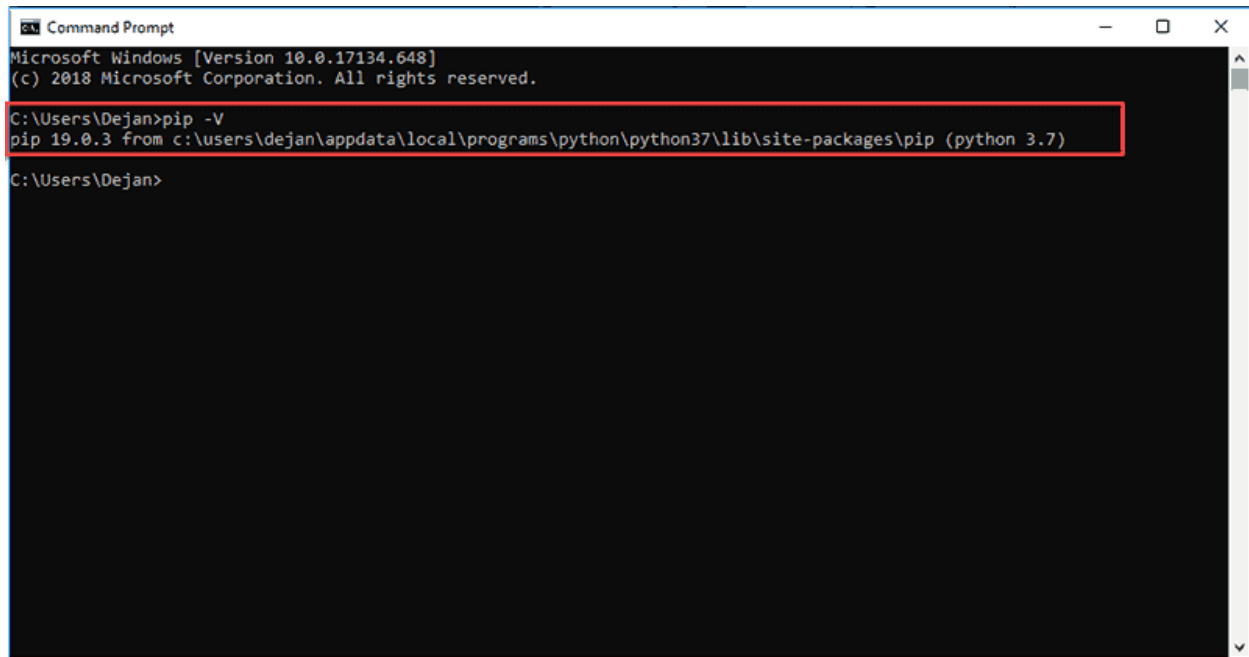
Step 5: Verify Pip Was Installed

If you opted to install an older version of Python, it is possible that it did not come with Pip preinstalled. Pip is a powerful package management system for Python software packages. Thus, make sure that you have it installed.

We recommend using Pip for most Python packages, especially when working in virtual environments.

To verify whether Pip was installed:

1. Open the Start menu and type “cmd.”
2. Select the Command Prompt application.
3. Enter `pip -V` in the console. If Pip was installed successfully, you should see the following output:



```
Command Prompt
Microsoft Windows [Version 10.0.17134.648]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\Dejan>pip -V
pip 19.0.3 from c:\users\dejan\appdata\local\programs\python\python37\lib\site-packages\pip (python 3.7)

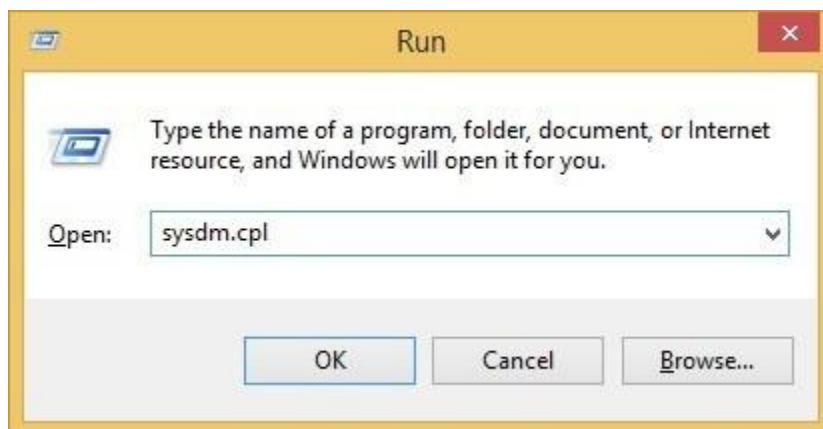
C:\Users\Dejan>
```

Step 6: Add Python Path to Environment Variables (Optional)

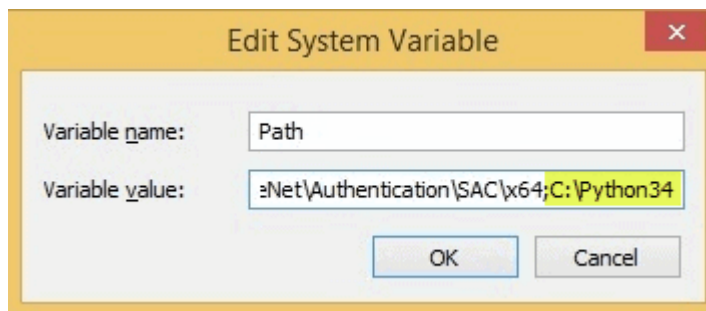
We recommend you go through this step if your version of the Python installer does not include the Add Python to PATH checkbox or if you have not selected that option.

Setting up the Python path to system variables alleviates the need for using full paths. It instructs Windows to look through all the PATH folders for “python” and find the install folder that contains the python.exe file.

1. Open the Start menu and start the Run app.



2. Type **sysdm.cpl** and click **OK**. This opens the **System Properties** window.
3. Navigate to the **Advanced** tab and select **Environment Variables**.
4. Under **System Variables**, find and select the **Path** variable.
5. Click **Edit**.
6. Select the **Variable value** field. Add the path to the **python.exe** file preceded with a **semicolon (;)**. For example, in the image below, we have added “**;C:\Python34**.”



7. Click **OK** and close all windows.

By setting this up, you can execute Python scripts like this: **Python script.py**

Instead of this: **C:/Python34/Python script.py**

As you can see, it is cleaner and more manageable.

5.2 BACK END (Wamp Server)

MySQL is the world's most used open source relational database management system (RDBMS) as of 2008 that run as a server providing multi-user access to a number of databases. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation.

MySQL is a popular choice of database for use in web applications, and is a central component of the widely used LAMP open source web application software stack—LAMP is an acronym for "Linux, Apache, MySQL, Perl/PHP/Python." Free-software-open source projects that require a full-featured database management system often use MySQL.

For commercial use, several paid editions are available, and offer additional functionality. Applications which use MySQL databases include: TYPO3, Joomla, WordPress, phpBB, MyBB, Drupal and other software built on the LAMP software stack. MySQL is also used in many high-profile, large-scale World Wide Web products, including Wikipedia, Google (though not for searches), Imagebook, Twitter, Flickr, Nokia.com, and YouTube.

Inter images

MySQL is primarily an RDBMS and ships with no GUI tools to administer MySQL databases or manage data contained within the databases. Users may use the included command line tools, or use MySQL "front-ends", desktop software and web applications that create and manage MySQL databases, build database structures, back up data, inspect status, and work with data records. The official set of MySQL front-end tools, MySQL Workbench is actively developed by Oracle, and is freely available for use.

Graphical

The official MySQL Workbench is a free integrated environment developed by MySQL AB, which enables users to graphically administer MySQL databases and visually design database structures. MySQL Workbench replaces the previous package of software, MySQL GUI Tools. Similar to other third-party packages, but still considered the authoritative MySQL frontend, MySQL Workbench lets users manage database design & modeling, SQL development (replacing MySQL Query Browser) and Database administration (replacing MySQL Administrator).MySQL Workbench is available in two editions, the regular free and open source Community Edition which may be downloaded

from the MySQL website, and the proprietary Standard Edition which extends and improves the feature set of the Community Edition.

Command line

MySQL ships with some command line tools. Third-parties have also developed tools to manage a MySQL server, some listed below. Maatkit - a cross-platform toolkit for MySQL, PostgreSQL and Memcached, developed in Perl Maatkit can be used to prove replication is working correctly, fix corrupted data, automate repetitive tasks, and speed up servers. Maatkit is included with several GNU/Linux distributions such as CentOS and Debian and packages are available for Programming. MySQL works on many different system platforms, including AIX, BSDi, FreeBSD, HP-UX, eComStation, i5/OS, IRIX, Linux, Mac OS X, Microsoft Windows, NetBSD, Novell NetWare, OpenBSD, OpenSolaris, OS/2 Warp, QNX, Solaris, Symbian, SunOS, SCO Open Server, SCO UnixWare, Sanos and Tru64. A port of MySQL to OpenVMS also exists.

MySQL is written in C and C++. Its SQL parser is written in yacc, and a home-brewed lexical analyzer. Many programming languages with language-specific APIs include libraries for accessing MySQL databases. These include MySQL Connector/Net for integration with Microsoft's Visual Studio (languages such as C# and VB are most commonly used) and the JDBC driver for Java. In addition, an ODBC interim age called MyODBC allows additional programming languages that support the ODBC inter image to communicate with a MySQL database, such as ASP or ColdFusion. The HTSQL - URL-based query method also ships with a MySQL adapter, allowing direct interaction between a MySQL database and any web client via structured URLs.

Features

As of April 2009, MySQL offered MySQL 5.1 in two different variants: the open source MySQL Community Server and the commercial Enterprise Server. MySQL 5.5 is offered under the same licenses. They have a common code base and include the following features:

- A broad subset of ANSI SQL 99, as well as extensions
- Cross-platform support
- Stored procedures
- Triggers
- Cursors
- Updatable Views
- Information schema
- Strict mode (ensures MySQL does not truncate or otherwise modify data to conform to an underlying data type, when an incompatible value is inserted into that type)
- X/Open XAdistributed transaction processing (DTP) support; two phase commit as part of this, using Oracle's InnoDB engine
- Transactions with the InnoDB, and Cluster storage engines
- SSL support
- Query caching
- Sub-SELECTs (i.e. nested SELECTs)
- Replication support (i.e. Master-Master Replication & Master-Slave Replication) with one master per slave, many slaves per master, no automatic support for multiple masters per slave.
- Full-text indexing and searching using MyISAM engine
- Embedded database library
- Partititoned tables with pruning of partitions in optimiser
- Shared-nothing clustering through MySQL Cluster
- Hot backup (via mysqlhotcopy) under certain conditions

Multiple storage engines, allowing one to choose the one that is most effective for each table in the application (in MySQL 5.0, storage engines must be compiled in; in MySQL 5.1, storage engines can be dynamically loaded at run time): Native storage engines (MyISAM, Falcon, Merge, Memory (heap), Federated, Archive, CSV, Blackhole, Cluster, EXAMPLE, Maria, and InnoDB, which was made the default as of 5.5). Partner-developed storage engines (solidDB, NitroEDB, ScaleDB, TokuDB, Infobright (formerly Brighthouse), Kickfire, XtraDB, IBM DB2). InnoDB used to be a partner-developed storage engine, but with recent acquisitions, Oracle now owns both MySQL core and InnoDB.

CHAPTER 6

DESIGN AND DEVELOPMENT

6.1 ARCHITECTURAL DESIGN

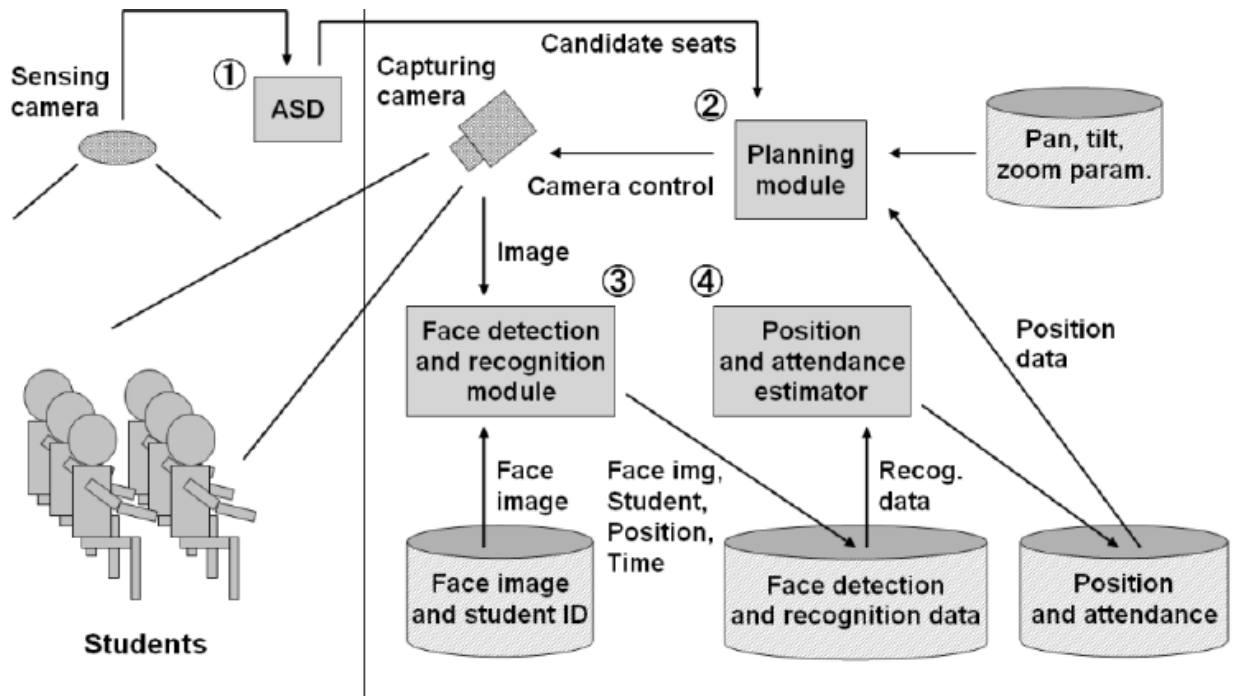
A system architecture or systems architecture is the conceptual model that defines the structure, behavior, and more views of a system. An architecture description is a formal description and representation of a system, organized in a way that supports reasoning about the structures and behaviors of the system. System architecture can comprise system components, the externally visible properties of those components, the relationships (e.g. the behavior) between them. It can provide a plan from which products can be procured, and systems developed, that will work together to implement the overall system. There have been efforts to formalize languages to describe system architecture; collectively these are called architecture description languages (ADLs).

Various organizations define systems architecture in different ways, including:

- An allocated arrangement of physical elements which provides the design solution for a consumer product or life-cycle process intended to satisfy the requirements of the functional architecture and the requirements baseline.
- Architecture comprises the most important, pervasive, top-level, strategic inventions, decisions, and their associated rationales about the overall structure (i.e., essential elements and their relationships) and associated characteristics and behavior.
- If documented, it may include information such as a detailed inventory of current hardware, software and networking capabilities; a description of long-range plans and priorities for future purchases, and a plan for upgrading and/or replacing dated equipment and software.

An architecture diagram is a graphical representation of a set of concepts that are part of architecture, including their principles, elements and components. Architecture diagram can help system designers and developers visualize the high-level, overall structure of their system or application, in order to ensure the system meets their users' needs. Using architecture diagram, you

can also describe patterns that are used throughout the design. It's somewhat like a blueprint that you use as a guide, so that you and your colleagues can discuss, improve and follow.



6.2 DATABASE DESIGN

Staff Details table

Field	Type	Null	Default
id	int(100)	Yes	NULL
name	varchar(100)	Yes	NULL
department	varchar(100)	Yes	NULL
qualification	varchar(100)	Yes	NULL
experience	varchar(100)	Yes	NULL
position	varchar(100)	Yes	NULL

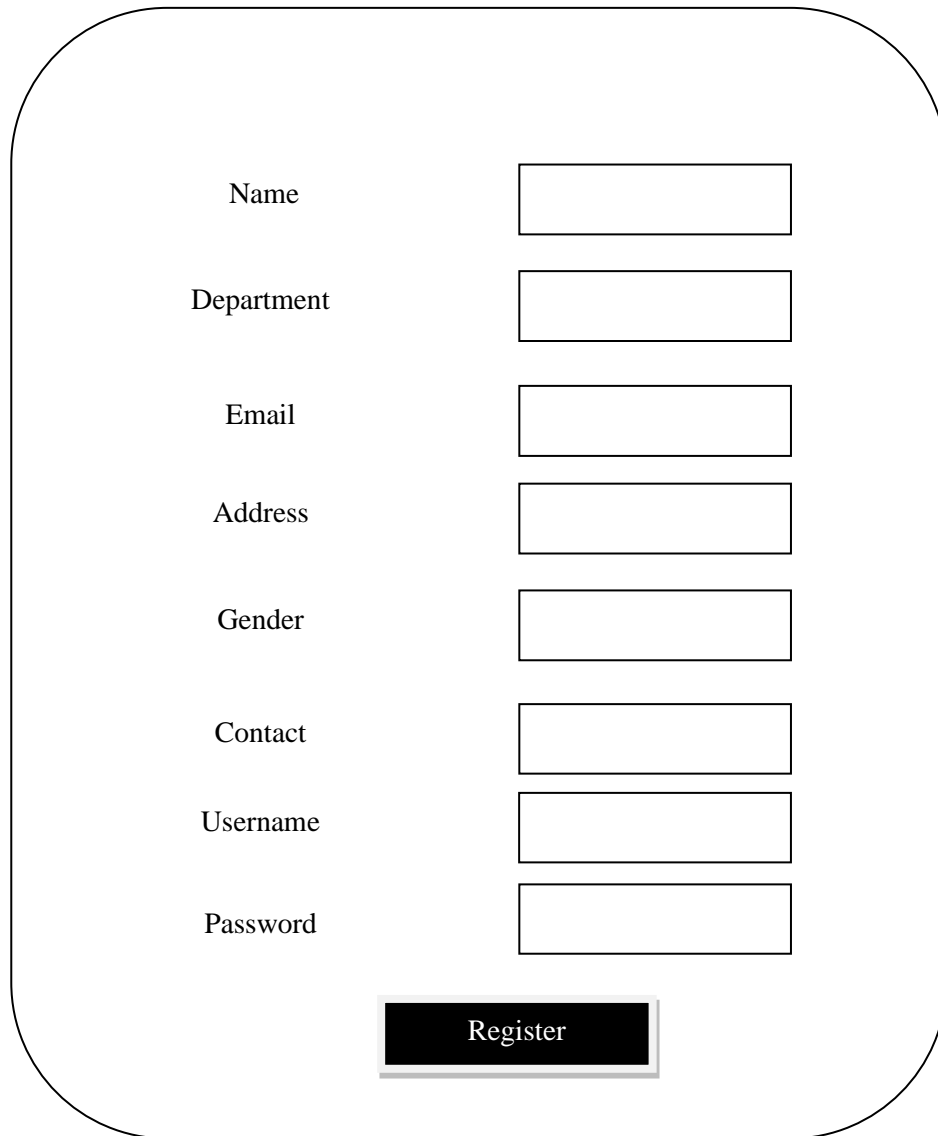
contact	varchar(100)	Yes	NULL
email	varchar(100)	Yes	NULL
year_join	varchar(100)	Yes	NULL
status	varchar(100)	Yes	NULL
report	varchar(100)	Yes	NULL

Student details

Field	Type	Null	Default
id	int(100)	Yes	NULL
sname	varchar(100)	Yes	NULL
regno	varchar(100)	Yes	NULL
dept	varchar(100)	Yes	NULL
month	varchar(100)	Yes	NULL
totalpresent	varchar(100)	Yes	NULL
totalabsent	varchar(100)	Yes	NULL
percentage	varchar(100)	Yes	NULL
status	varchar(100)	Yes	NULL
report	varchar(100)	Yes	NULL

6.3 INPUT AND OUTPUT DESIGN

INPUT DESIGN



A registration form titled "Student Register" enclosed in a rounded rectangle. It contains eight input fields for personal information, each preceded by a label: Name, Department, Email, Address, Gender, Contact, Username, and Password. A black "Register" button is positioned at the bottom right of the form area.

Name	<input type="text"/>
Department	<input type="text"/>
Email	<input type="text"/>
Address	<input type="text"/>
Gender	<input type="text"/>
Contact	<input type="text"/>
Username	<input type="text"/>
Password	<input type="password"/>

Student Register

Name	<input type="text"/>
Department	<input type="text"/>
Email	<input type="text"/>
Address	<input type="text"/>
Gender	<input type="text"/>
Contact	<input type="text"/>
Username	<input type="text"/>
Password	<input type="text"/>
<input type="button" value="Register"/>	

Staff Register

Username

Password

Submit

Admin, staff and Student Login

OUTPUT DESIGN

id	Student Name	Subject	Total Present	Percentage
124	Parves	Maths	15	50%

Attendance

id	Name	Department	Joined Year	Qualification
124	Shive	MCA	2002	M.Phil

Staff view

CHAPTER 7

IMPLEMENTATION AND TESTING

7.1 IMPLEMENTATION

- Admin Access
- Staff Access
- Student Details
- Train Face

ADMIN ACCESS

Admin Login:

Admin is the super user like principal/ HOD where he/ she maintains the database of the college. The admin will have a separate login session so that they can view the further details.

Admin View:

The admin will view the details of the student by login in their account. The admin will get the student information and the details about attendance, marks etc

STAFF ACCESS

Staff Register and Login:

Staff will have a separate registration and login. So that they can use their separate account. The staff had to enter their details and they have to create an account.

Staff Add details:

The staff will add the details of the student in the database server created for this system. The staff will be provided with the page where the details will be added. And the details will be attendance, academic details and personel details.

STUDENT ACCESS**Student Login**

The stduent will be added by the staff where they can directly make out a login session with the developed system.

TRAIN FACE

Face detection here is performed using Haar-Cascade Classifier with OpenCV. Haar Cascade algorithm needs to be trained to detect human faces before it can be used for face detection. This is called feature extraction. The haar cascade training data used is an xml filehaarcascade_frontalface_default.

Face Attendance

Face recognition process can be divided into three stepsprepare training data, train face recognizer, prediction. Here training data will be the images present in the dataset. They will be assigned with a integer label of the student it belongs to. These images are then used for face recognition. Face recognizer used in this system is Local Binary Pattern Histogram. Initially, the list of local binary patterns (LBP) of entire face is obtained. These LBPs are converted into decimal number and then histograms of all those decimal values are made. At the end, one histogram will be formed for each images in the training data. Later, during recognition process histogram of the

face to be recognized is calculated and then compared with the already computed histograms and returns the best matched label associated with the student.

Student view

The students are expected to enter their personal details which will then be verified by the teachers. The personal details include residential address, email address, contact details (students as well as parents contact details) etc. The student view out the attendance placed by each element placed.

7.2 TESTING

Testing is a series of different tests that whose primary purpose is to fully exercise the computer based system. Although each test has a different purpose, all work should verify that all system element have been properly integrated and performed allocated function. Testing is the process of checking whether the developed system works according to the actual requirement and objectives of the system. The philosophy behind testing is to find the errors. A good test is one that has a high probability of finding an undiscovered error. A successful test is one that uncovers the undiscovered error. Test cases are devised with this purpose in mind. A test case is a set of data that the system will process as an input.

SYSTEM TESTING

After a system has been verified, it needs to be thoroughly tested to ensure that every component of the system is performing in accordance with the specific requirements and that it is operating as it should including when the wrong functions are requested or the wrong data is introduced.

Testing measures consist of developing a set of test criteria either for the entire system or for specific hardware, software and communications components. For an important and sensitive system such as an electronic voting system, a structured system testing program may be established to ensure that all aspects of the system are thoroughly tested.

Testing measures that could be followed include:

- Applying functional tests to determine whether the test criteria have been met
- Applying qualitative assessments to determine whether the test criteria have been met.
- Conducting tests in “laboratory” conditions and conducting tests in a variety of “real life” conditions.
- Conducting tests over an extended period of time to ensure systems can perform consistently.
- Conducting “load tests”, simulating as close as possible likely conditions while using or exceeding the amounts of data that can be expected to be handled in an actual situation.

Test measures for hardware may include:

- Applying “non-operating” tests to ensure that equipment can stand up to expected levels of physical handling.
- Testing “hard wired” code in hardware (firmware) to ensure its logical correctness and that appropriate standards are followed.

Tests for software components also include:

- Testing all programs to ensure its logical correctness and that appropriate design, development and implementation standards have been followed.
- Conducting “load tests”, simulating as close as possible a variety of “real life” conditions using or exceeding the amounts of data that could be expected in an actual situation.
- Verifying that integrity of data is maintained throughout its required manipulation.

TYPES OF TESTING DONE

UNIT TESTING

The first test in the development process is the unit test. The source code is normally divided into modules, which in turn are divided into smaller units called units. These units have specific behavior. The test done on these units of code is called unit test. Unit test depends upon the language on which the project is developed.

Unit tests ensure that each unique path of the project performs accurately to the documented specifications and contains clearly defined inputs and expected results. Functional and reliability test in an Engineering environment producing tests for the behavior of components (nodes and vertices) of a product to ensure their correct behavior prior to system integration.

SYSTEM TESTING

Several modules constitute a project. If the project is long-term project, several developers write the modules. Once all the modules are integrated, several errors may arise. The testing done at this stage is called system test. System testing ensures that the entire integrated software system meets requirements. It tests a configuration to ensure known and predictable results. System testing is based on process descriptions and flows, emphasizing pre-driven process links and integration points. Testing a specific hardware/software installation. This is typically performed on a COTS (commercial off the shelf) system or any other system comprised of disparate parts where custom configurations and/or unique installations are the norm.

INTEGRATION TESTING

Testing is which modules are combined and tested as a group. Modules are typically code modules, individual applications, source and destination applications on a network, etc. Integration Testing follows unit testing and precedes system testing. Testing after the product is code complete. Betas are often widely distributed or even distributed to the public at large in hopes that they will buy the final product when it is release.

VALIDATION TESTING

Validation testing is testing where tester performed functional and non-functional testing. Here functional testing includes Unit Testing (UT), Integration Testing (IT) and System Testing (ST), and non-functional testing includes User acceptance testing (UAT). Validation testing is also known as dynamic testing, where we are ensuring that "we have developed the product right." And it also checks that the software meets the business needs of the client. It is a process of checking the software during or at the end of the development cycle to decide whether the software follow the specified business requirements. We can validate that the user accepts the product or not.

CHAPTER 8

CONCLUSION

This system aims to build an effective class attendance system using face recognition techniques. The proposed system will be able to mark the attendance via face Id. It will detect faces via webcam and then recognize the faces. After recognition, it will mark the attendance of the recognized student and update the attendance record. This study aims at developing and understanding of the Attendance System with Face Recognition. Knowledge of the framework and critical success factors in the implementation of Deep Learning is critical to the successful implementation. FaceNet returns a 128-dimensional vector embedding for each face.

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Book reference:

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- [2] Hervé J. Franceschi , Python App Development, Jones & Bartlett Learning; 1 edition (January 11, 2017),
- [3] Ryan Cohen , GUI Design for Python Apps, Apress; 1st ed. edition (August 28, 2014)

Web reference:

- 4. <http://www.mjret.in/V2I3/M11-2-3-7-2015.pdf>
- 5. <http://getdocumentation.info/tags/face-attendance-project-documentation-pdf>

ANNEXURE

A) SOURCE CODE

```
from time import strptime

a="16:02:46"
b="16:03:08"
first_time = strptime(a, '%H:%M:%S')
later_time = strptime(b, '%H:%M:%S')

a1=(first_time[3])
a2=(first_time[4])
a3=(first_time[5])

b1=(later_time[3])
b2=(later_time[4])
b3=(later_time[5])

c1=a1-b1
c2=a2-b2
c3=a3-b3

c1=((c1*60)*60)
c2=c2*60

final_duration=abs(c3)+abs(c2)+abs(c1)

print(final_duration)

#
# print(difference)

# from datetime import date
#
# d0 = date(2008, 8, 18)
# d1 = date(2008, 9, 26)
# delta = d1 - d0
# print(delta.days)
# camera.py
```

```

import PIL.Image
import cv2
from PIL import Image
class VideoCamera(object):
    def __init__(self):
        # Using OpenCV to capture from device 0. If you have trouble capturing
        # from a webcam, comment the line below out and use a video file
        # instead.

        self.video = cv2.VideoCapture(0)
        # If you decide to use video.mp4, you must have this file in the folder
        # as the main.py.
        # self.video = cv2.VideoCapture('video.mp4')

    def __del__(self):
        self.video.release()

    def get_frame(self):
        success, image = self.video.read()
        frame=image
        # eye_cascade = cv2.CascadeClassifier('haarcascade_righteye_2splits.xml')

        face_cascade = cv2.CascadeClassifier('haarcascade_frontalface_default.xml')

        # Read the frame
        #_, img = cap.read()

        # Convert to grayscale
        gray = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)

        # Detect the faces
        faces = face_cascade.detectMultiScale(gray, 1.1, 4)
        gray = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)
        #eyes = eye_cascade.detectMultiScale(gray, 1.1, 4)
        i = 0
        # print(len(eyes))
        # for (x, y, w, h) in eyes:
        #     i = (len(eyes))
        #     w1 = x
        #     cv2.rectangle(frame, (x, y), (x + w, y + h), (255, 0, 0), 2)
        #     img1 = frame[y:y + h, x:x + w]
        # Draw the rectangle around each face
        j = 1

```

```

for (x, y, w, h) in faces:
    mm=cv2.rectangle(image, (x, y), (x+w, y+h), (255, 0, 0), 2)
    cv2.imwrite("myface.jpg", mm)
    image = cv2.imread("myface.jpg")
    cropped = image[y:y+h, x:x+w]
    gg="f"+str(j)+".jpg"
    cv2.imwrite("faces/"+gg, cropped)
    mm2 = PIL.Image.open('faces/'+gg)
    rz = mm2.resize((100,100), PIL.Image.ANTIALIAS)
    rz.save('faces/'+gg)
    j += 1

```

```

ret, jpeg = cv2.imencode('.jpg', image)
return jpeg.tobytes()

```

```

import os
from time import strptime

```

```

import imagehash
import PIL.Image
import cv2
import datetime
import pymysql
from PIL import Image

```

```

class VideoCamera1(object):
    def __init__(self):
        self.video = cv2.VideoCapture(0)
    def __del__(self):
        self.video.release()

    def get_frame(self):
        user = 'root'
        password = ""
        host = 'localhost'
        database = 'python_multiface_detection'
        conn = pymysql.connect(user='root', password="", host='localhost', database=database)
        x = datetime.datetime.now()
        time = (x.strftime("%X"))
        date = datetime.date.today()
        cursor = conn.cursor()
        cursor1 = conn.cursor()
        name = "testing"
        with open('data.txt') as f:

```

```

        lines = f.readline()
        data= str(lines).split("^")
        val = 100
        dir="faces"
        dir1 = os.listdir(dir)

        for x2 in dir1:
            path=dir+"/"+str(x2)
            os.remove(path)

        success, image = self.video.read()
        frame=image
        face_cascade = cv2.CascadeClassifier('haarcascade_frontalface_default.xml')
        gray = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)
        faces = face_cascade.detectMultiScale(gray, 1.1, 4)
        j = 1
        for (x, y, w, h) in faces:
            mm=cv2.rectangle(image, (x, y), (x+w, y+h), (255, 0, 0), 2)
            cv2.imwrite("myface.jpg", mm)
            image = cv2.imread("myface.jpg")
            cropped = image[y:y+h, x:x+w]
            gg="f"+str(j)+".jpg"
            input_image="faces/"+gg
            cv2.imwrite("faces/"+gg, cropped)
            mm2 = PIL.Image.open('faces/'+gg)
            rz = mm2.resize((100,100), PIL.Image.ANTIALIAS)
            rz.save('faces/'+gg)
            j += 1
            #####
            lastimg = cv2.resize(cropped, (100, 100))
            str1 = name + "\\tt.jpg"
            cv2.imwrite(str1, lastimg)
            x1 = "static/photo/"
            arr = os.listdir(x1)
            for x2 in arr:
                path=x1+"/"+str(x2)
                hash0 = imagehash.average_hash(Image.open(path))
                hash1 = imagehash.average_hash(Image.open(input_image))
                cc1 = hash1 - hash0
                x = x2.split(".")
                if(cc1<=15):
                    cursor1.execute("SELECT * from student_attendance where class_name='"+
str(data[0]) + "' and subject='"+ str(data[1]) + "' and hour='"+str(data[2])+"' and
student='"+str(x[0])+"'")
                    myresult = cursor1.fetchall()
                    cursor1.close()

```

```

        if (len(myresult) == 0):
            cursor.execute("insert into student_attendance values('" + str(data[0]) + "','" +
str(data[1]) + "','" + str(data[2]) + "','" + str(data[3]) + "','" + str(date) + "','" + str(time) + "','" +
str(x[0]) + "','0','" + str(time) + "')")
            conn.commit()
            conn.close()
        else:
            lll=myresult[0]
            last_min=lll[8]
            status=lll[7]
            first_time = strptime(last_min, '%H:%M:%S')
            later_time = strptime(time, '%H:%M:%S')
            a1 = (first_time[3])
            a2 = (first_time[4])
            a3 = (first_time[5])
            b1 = (later_time[3])
            b2 = (later_time[4])
            b3 = (later_time[5])
            c1 = a1 - b1
            c2 = a2 - b2
            c3 = a3 - b3
            c1 = ((c1 * 60) * 60)
            c2 = c2 * 60
            final_duration = abs(c3) + abs(c2) + abs(c1)
            if(final_duration<60):
                status=int(status)+int(final_duration)
                x = x2.split(".")
                cursor.execute("update student_attendance set
status='"+str(status)+"',report='"+time+"' where class_name='"+ str(data[0]) + "' and subject='"
+ str(data[1]) + "' and hour='"+str(data[2])+"' and student='"+str(x[0])+"'")
                conn.commit()
                conn.close()
            ret, jpeg = cv2.imencode('.jpg', image)
            return jpeg.tobytes()

```

<!--

Author: W3layouts

Author URL: <http://w3layouts.com>

License: Creative Commons Attribution 3.0 Unported

License URL: <http://creativecommons.org/licenses/by/3.0/>

-->

<!DOCTYPE HTML>

<html lang="zxx">

<head>

<title></title>

```

    <meta name="viewport" content="width=device-width, initial-scale=1">
    <meta charset="utf-8">
    <meta name="keywords" content="Opsimathy Responsive web template, Bootstrap Web
Templates, Flat Web Templates, Android Compatible web template,
SmartPhone Compatible web template, free WebDesigns for Nokia, Samsung, LG,
SonyEricsson, Motorola web design" />
    <script>
        addEventListener("load", function () {
            setTimeout(hideURLbar, 0);
        }, false);

        function hideURLbar() {
            window.scrollTo(0, 1);
        }
    </script>

    <!-- Bootstrap Core CSS -->
<style>
/*
Author: W3layout
Author URL: http://w3layouts.com
License: Creative Commons Attribution 3.0 Unported
License URL: http://creativecommons.org/licenses/by/3.0/
*/

html,
body {
    font-family: 'Poppins', sans-serif;
    font-size: 100%;
    overflow-x: hidden;
    background:#f5f7f8;
}

body a {
    transition: 0.5s all ease;
    -webkit-transition: 0.5s all ease;
    -moz-transition: 0.5s all ease;
    -o-transition: 0.5s all ease;
    -ms-transition: 0.5s all ease;
    text-decoration: none;
}

h1,
h2,
h3,
h4,

```



```

h5,
h6 {
    margin: 0;
    font-weight: 600;
    font-family: 'Raleway', sans-serif;
}

p {
    line-height: 1.8;
    font-size: 15px;
    color: #333;
    letter-spacing: 0.5px;
}

ul {
    margin: 0;
    padding: 0;
}

li {
    list-style-type: none;
}

body a:hover {
    text-decoration: none;
}

/* banner */

/* header */

.navbar-light .navbar-brand {
    font-size: 1em;
    color: #000;
}

header h1 a span {
    color: #fff;
    display: block;
    font-size: 12px;
    letter-spacing: 5px;
    word-spacing: 5px;
}

.navbar-light .navbar-nav .nav-link {
    font-weight: 500;
}

```

```

    text-transform: capitalize;
    color: #000;
    letter-spacing: 1px;
    border-bottom: 1px solid #fff;
}

.navbar-light .navbar-nav .nav-link:hover,
.navbar-light .navbar-nav .nav-link:focus,
.navbar-light .navbar-nav .show>.nav-link,
.navbar-light .navbar-nav .active>.nav-link,
.navbar-light .navbar-nav .nav-link.show,
.navbar-light .navbar-nav .nav-link.active {
    color: #a40eff;
    border-bottom: 1px solid #a40eff;
}

.w3ls-btn {
    letter-spacing: 1px;
    font-weight: 600;
}

/*-- //header --*/
/* -- TOP HEADER */
.top-middle li {
    display: inline-block;
}
.top .top-middle, .top .top-right {
    padding: 0px;
}
.top .top-left {
    padding: 4px 0 0;
    text-align: left;
}
.top-left li {
    display: inline-block;
    color: #fff;
    letter-spacing: 1px;
    font-size: 14px;
}
.top-left li a{
    color: #fff;
}
.top {
    padding: 10px 0;
    background: #a40eff;
}

```

```

.top-middle {
    text-align: right;
}
.top-left p{
    color:#fff;
    font-size: 16px;
    margin-top: 3px;
}
.top-left i.fab fa {
    margin-right: 2px;
    color: #ffffff;
    font-size: 20px;
}

.top-middle li {
    margin-right: 15px;
}
.top-middle i.fab.fa-facebook-f {
    font-size: 16px;
    text-align: center;
    line-height: 29px;
    width: 30px;
    height: 30px;
}
.top-middle i.fab.fa-facebook-f:hover {
    color: #527dbd;
}
.top-middle i.fab.fa-twitter {
    font-size: 16px;
    text-align: center;
    line-height: 29px;
    width: 30px;
    height: 30px;
}
.top-middle i.fab.fa-twitter:hover {
    color: #1da1f2;
}
.top-middle i.fab.fa-google-plus-g {
    font-size: 16px;
    text-align: center;
    line-height: 29px;
    width: 30px;
    height: 30px;
}
.top-middle i.fab.fa-google-plus-g:hover {
    color: #dd4b39;
}

```

```

}
.top-middle i.fab.fa-linkedin-in {
  font-size: 16px;
  text-align: center;
  line-height: 29px;
  width: 30px;
  height: 30px;
}
.top-middle i.fab.fa-linkedin-in:hover {
  color: #0077b5;
}
}
.top-middle i.fab {
  color: #fff;
  transition: 0.5s all;
  -webkit-transition: 0.5s all;
  -moz-transition: 0.5s all;
  -o-transition: 0.5s all;
  -ms-transition: 0.5s all;
}
}
.t-op.row {
  margin: 0;
}
}
/* -- //TOP HEADER */
.navbar {
  padding: 0.5rem 0.5rem;
}
}
/* banner */

.banner {
  background: url(../static/images/bg1.jpg)no-repeat;
  -webkit-background-size: cover;
  -moz-background-size: cover;
  -o-background-size: cover;
  -ms-background-size: cover;
  background-size: cover;
  height: 45vw;
}

}

.banner-text {
  padding: 20vw 0 0;
}
}
h4.agile-title {
  color: #fff;
  font-size: 2.8em;
  text-shadow: 3px 1px 1px #000;
  font-weight: 500;
}

```

```

    line-height: 1.5em;
    letter-spacing: 2px;
}

section.services {
    position: relative;
    padding-bottom: 13em;
}

.banner-bottom-main {
    box-shadow: -3px 0px 15px 1px rgba(0, 0, 0, 0.08);
    padding: 4em 3em;
    background: #fff;
    text-align: left;
    top: -15em;
    position: absolute;
    width: 70%;
}

.banner-btmg1 h3 {
    font-size: 28px;
    color: #eb1d50;
    font-weight: 500;
}

.banner-subg1 h3, .about-bottom h5 {
    color: #222222;
    font-size: 20px;
    letter-spacing: 1px;
    text-transform: capitalize;
}

.about-bottom h5 {
    color: #FFF;
}

.w3ls-about-bottom h5 {
    color: #9a3c03;
    font-weight: 500;
}

.banner-subg1 span.fa {
    font-size: 50px;
    color: #222;
}

.form-text {
    position: relative;
}

.banner-btmg1 img {
    position: absolute;
    right: -30px;
    width: 28%;
}

```

```

    top: -1px;
}
.form-text p {
    color: #fff;
    margin-top: 5px;
}
.form-tx textarea {
    font-size: 1em;
    color: #000;
    padding: 0.75em 1em;
    width: 100%;
    outline: none;
    resize: none;
    height: 3em;
    border: 1px solid #c5c0c0;
    background: #f5f5f5;
}
.read-btn a {
    color: #252424;
    display: inline-block;
    text-decoration: none;
    padding: 4px 16px;
    font-size: 18px;
    font-weight: 600;
    letter-spacing: 2px;
    text-transform: capitalize;
    background: #eb1d50;
    border: 2px solid #eb1d50;
    transition: .5s ease-in;
    -webkit-transition: .5s ease-in;
    -moz-transition: .5s ease-in;
    -o-transition: .5s ease-in;
    -ms-transition: .5s ease-in;
    border-radius: 0px;
}
.read-btn a:hover{
    background: #ffd200;
}
h4.modal-title {
    font-size: 24px;
    color: #000;
    font-weight: 600;
    letter-spacing: 2px;
}
.modal-body p {
    font-size: 15px;

```

```

    color: #777;
    line-height: 1.8em;
    padding: 20px 0;
}
/*-- //banner-bottom --*/
/* //banner */
.new_top i {
    font-size: 30px;
    color: #2e1f54;
}
.new_top h3 {
    font-size: 22px;
    letter-spacing: 2px;
    font-weight: 600;
    line-height: 1.4em;
    color: #000000;
}
.new_top p {
    font-size: 15px;
    line-height: 1.8em;
    color: #777;
}
.new_top {
    padding: 20px 10px;
}
/*-- details --*/
h3.w3ls-title {
    font-size: 2.7em;
    color: #000;
}
.card.w3l-acd:nth-child(2) {
    margin: 1em 0;
}
span.fa.fa-check.mr-2 {
    color: #a40eff;
}
.card-header {
    padding: 0.4rem 1.25rem;
}
button.btn.btn-link {
    color: #000;
    letter-spacing: 2px;
    font-weight: 600;
}
button.btn.btn-link:hover{
    text-decoration:none;

```

```

}
/*-- //details --*/
/*-- stats --*/
.w3layouts_stats_left {
    padding: 0;
    text-align: center;
}
.w3layouts_stats_left p {
    font-size: 2.5em;
    font-weight: 500;
    letter-spacing: 2px;
    color: #2e1f54;
    margin: 0 0 0.2em 0;
}
.w3layouts_stats_left h3 {
    font-size: 18px;
    color: #000;
    letter-spacing: 1px;
}
.inner_w3l_agile_grids-1 h6 {
    font-size: 15px;
    margin-top: 0.8em;
    color: #000;
}
section.stats h4 {
    font-size: 40px;
    width: 65%;
    text-align: center;
    line-height: 1.2em;
    margin: 0 auto;
    color: #2c363e;
    text-shadow: 0 1px 2px rgba(0, 0, 0, 0.37);
}
p.stap {
    font-size: 15px;
    color: #000;
    margin: 1em 0 5em;
    text-align: center;
}
/*-- //stats --*/
/*-- testimonials --*/
.tex-t {
    float: right;
    padding: 1em 2em 0;
}
.w3_agile_testimonials_grid_left img {

```



```

    border-radius: 50%;
}
.tex-t h4 {
    color: #ff0ebe;
    font-size: 20px;
}
.agile_testimonials_grid p {
    color: #777;
    line-height: 2em;
    margin-bottom: 1em;
    text-align: left;
    letter-spacing: 1px;
    font-size: 15px;
}
.w3_agile_testimonials_grid_right {
    text-align: left;
    float: left;
    width: 94%;
    padding: 1em 4em;
    background: #fff;
    position: relative;
}
.test-tooltip:before {
    content: "";
    position: absolute;
    left: -17px;
    top: 38%;
    border-left: 10px solid transparent;
    border-right: 10px solid transparent;
    border-bottom: 14px solid #fff;
    transform: rotate(-90deg);
    -webkit-transform: rotate(-90deg);
    -moz-transform: rotate(-90deg);
    -o-transform: rotate(-90deg);
    -ms-transform: rotate(-90deg);
}
.test-tooltip1:after {
    content: "";
    position: absolute;
    left: 7%;
    bottom: -8%;
    border-left: 10px solid transparent;
    border-right: 10px solid transparent;
    border-bottom: 15px solid #fff;
    transform: rotate(90deg);
    -webkit-transform: rotate(178deg);
}

```

```

    -moz-transform: rotate(90deg);
    -o-transform: rotate(90deg);
    -ms-transform: rotate(90deg);
}
.w3_agile_testimonials_grid_left {
    margin-top: 0em;
    float: left;
}
.w3_agile_testimonials_grid {
    float: left;
    padding: 2em 0em 0;
}
.w3_agile_testimonials_grid_right h4 {
    font-size: 20px;
    color: #000;
    text-transform: uppercase;
    font-weight: 600;
    letter-spacing: 2px;
}
.w3_agile_testimonials_grid_right h5 {
    font-size: 14px;
    color: #87b200;
}
.agile_testimonials_grids {
    margin: 4em 0 2em;
}
/*--flexisel--*/
.flex-slider {
    background: #222227;
    padding: 70px 0 165px 0;
}
#flexiselDemo1 {
    display: none;
}
.nbs-flexisel-container {
    position: relative;
    max-width: 100%;
}
.nbs-flexisel-ul {
    position: relative;
    width: 9999px;
    margin: 0px;
    padding: 0px;
    list-style-type: none;
}
.nbs-flexisel-inner {

```

```

        overflow: hidden;
        margin: 0px auto;
        padding: 0em 0 0;
    }
    .nbs-flexisel-item {
        float: left;
        margin: 0;
        padding: 0px;
        position: relative;
        line-height: 35px;
    }
    .nbs-flexisel-item > img {
        cursor: pointer;
        position: relative;
    }
    /*---- Nav ---*/
    .nbs-flexisel-nav-left, .nbs-flexisel-nav-right {
        width: 40px;
        height: 40px;
        position: absolute;
        cursor: pointer;
        z-index: 100;
        background: url(../static/images/right1.png) no-repeat 8px 13px #2e1f54;
        top: 18% !important;
    }
    .nbs-flexisel-nav-left {
        right: 3%;
    }
    .nbs-flexisel-nav-right {
        left: 0%;
        background: url(../static/images/left1.png) no-repeat 8px 13px #2e1f54;
    }
    /*--//flexisel--*/
    .agile_testimonials_grid {
        margin: 0 0em 2em;
    }
    .port {
        font-size: 14px;
        letter-spacing: 1px;
        color: #000;
        padding: 0px 19em;
        line-height: 2em;
        text-align: center;
    }
    .ser-info{color:#fff;}
    /*-- //testimonials --*/

```

```

.testimonials {
  background: url(../static/images/bg3.jpg) no-repeat;
  background-size: cover;
  -webkit-background-size: cover;
  -moz-background-size: cover;
  -o-background-size: cover;
  -ms-background-size: cover;
  background-attachment: fixed;
}
.about-right h4 {
  font-size: 24px;
  font-weight: 600;
  color: #131212;
}
.testi-text {
  position: relative;
  padding: 24px;
}
.fone {
  margin-top: 30px;
}
.carousel-control .active {
  background: #31708f;
}
.adjust1 p {
  color: #777;
  line-height: 1.8em;
  text-align: left;
  font-size: 15px;
  letter-spacing: 1px;
}

.testi-left .carousel-control.left,
.testi-left .carousel-control.right {
  width: 19px;
  height: 19px;
}

.testi-text1:before {
  border-left: 10px solid #ad1a0a;
  border-right: none !important;
  left: auto !important;
  right: -3% !important;
}
.testi-text h4 {
  font-size: 1.3em;
}

```

```

        color: #a40eff;
        line-height: 1.5em;
        font-weight: 600;
        letter-spacing: 2px;
        text-align: left;
    }
    .caption.testi-text span {
        font-size: 1.2em;
        margin-right: 10px;
        color: #777;
    }

    .testi-text h5 {
        font-size: 1em;
        color: #000 ;
        line-height: 1.5em;
        font-weight: 600;
        letter-spacing: 2px;
        text-align: left;
    }

    .testi-left {
        width: 89%;
        margin: 0 auto;
        position: relative;
    }
    /*-- //testimonials --*/
    .stats1 {
        background: #ffffff;
        box-shadow: 0 0 29px 0 rgba(41, 41, 41, 0.19);
        padding: 57px;
    }
    .features{
        background: url(../static/images/bg2.jpg)no-repeat center;
        background-size:cover;
    }
    .row.stats_inner.top-st {
        border-top: 1px solid #e8e8e8;
    }
    .stat-grids:nth-child(1){
        border-right: 1px solid #e8e8e8;
    }
    .heading-agileinfo {
        font-weight: 600;
        letter-spacing: 2px;
        font-size: 40px;

```

```

    text-align: center;
    color: #000;
    text-transform: capitalize;
    position: relative;
    margin-top: 0;
}
.heading-agileinfo span {
    margin-top: 1em;
    letter-spacing: 4px;
    text-transform: capitalize;
    color: #a40eff;
}
.heading-agileinfo :after {
    content: "";
    background:#a40eff;
    height: 2px;
    width:120px;
    position: absolute;
    top: 132%;
    right: 40%;
}
/*-- news --*/
h5.card-title {
    font-size: 20px;
    letter-spacing: 2px;
    margin-bottom: 1em;
    color: #2e1f54;
    font-weight: 600;
}
p.card-text {
    color: #777;
    font-size: 15px;
    line-height: 1.8em;
    letter-spacing: 1px;
}
/*-- //card --*/
h4.modal-title {
    font-size: 24px;
    color:#a40eff;
    font-weight: 600;
    letter-spacing: 2px;
}
.modal-body p {
    font-size: 15px;
    color: #777;
    line-height: 1.8em;

```

```

padding: 20px 0;
}
/*--news--*/

.agileits-abt-grids span {
color: #2e1f54;
font-size: 20px;
margin-right: 1em;
font-weight: 600;
}
h3.w3ls-title {
font-size: 3.2em;
color: #482d2e;
}

h4.w3ls-title {
font-size: 2em;
color: #000;
font-style: italic;
}

a.abt-agile {
color: #482d2e;
font-style: italic;
letter-spacing: 1px;
padding: 0;
border-bottom: 1px solid #e6caa2;
}

.agileits-abt-grids h4 {
font-weight: 600;
color: #fff;
font-size: 1.5em;
margin-bottom: 0.5em;
}

.section-3 {
background: #6887ff;
padding: 3em 0;
}

.agileits-abt-grids h4 {
font-weight: 600;
color: #040404;
text-transform: uppercase;
font-size: 1.5em;

```

```

    margin-bottom: 0.5em;
    letter-spacing: 1px;
}

p.about-text-wthree {
    color: #fff;
    width: 263px;
    font-weight: 500;
}
/* services */
.agile-why-text-2 {
    padding: 25px;
    box-shadow: 1px 0px 3px 1px rgba(0, 0, 0, 0.17);
}

.agile-why-text-2 h4 {
    font-size: 20px;
    letter-spacing: 1px;
}
.agile-why-text-2 p {
    font-size: 14px;
}

.wthree_features_grid i {
    width: 60px;
    height: 60px;
    text-align: center;
    font-size: 30px;
    color: #fff;
    line-height: 2;
    border-radius: 26px 0px 0px 26px;
    background: #2e1f54;
    margin-top: 1.2em;
}
.wthree_features_grid1 i {
    width: 60px;
    height: 60px;
    text-align: center;
    font-size: 30px;
    color: #fff;
    line-height: 2;
    border-radius: 0px 26px 26px 0px;
    background: #2e1f54;
    margin-top: 1.2em;
}
/* //services */

```



```

.footer-title span {
    color: #a40eff;
}
/*-- about --*/

section.w3l-abt {
    background: url(../static/images/bg2.jpg) no-repeat;
    background-size: cover;
    -webkit-background-size: cover;
    -moz-background-size: cover;
    -o-background-size: cover;
    -ms-background-size: cover;
    background-attachment: fixed;
}

h4.about-title {
    font-size: 7em;
    font-weight: bold;
    color: #031f9a;
}

h4.sub {
    font-size: 50px;
    font-weight: bold;
    color: #000;
    text-transform: capitalize;
}

h4.sub span {
    color: #e21111;
}

.about-bottom1 p {
    color: #fff;
}

.about-bottom1 h5 {
    font-size: 21px;
    letter-spacing: 1px;
    font-weight: 600;
    line-height: 1.4em;
    color: #fff;
    text-transform: uppercase;
}

.hi-icon {
    display: inline-block;
    width: 50px;

```

```

    height: 50px;
    text-align: center;
    color: #fff;
    border: 3px solid #ffffff;
}
.hi-icon:before {
    font-size: 1.5em;
    display: block;
    line-height: 2.12em;
}

.about-bottom-g1 h4,
.stats h5 {
    font-weight: 600;
    color: #031f9a;
    font-size: 30px;
}

/*-- //about --*/
footer {
    background-color: #0e0f10;
}

footer h3{
    font-size: 1.5em;
    color: #ffffff;
    margin-bottom: 20px;
    letter-spacing: 1px;
}

footer p {
    color: #bfbfbf;
    font-size: 15px;
    line-height: 1.8em;
}
footer ul li {
    display: block;
    color: #bfbfbf;
    font-weight: 400;
    font-size: 15px;
    margin: 6px 0;
    letter-spacing: 1px;
}
footer-list i {

```

```

        padding-right: 10px;
        color: #ffa41f;
    }

    footer ul li a {
        color: #bfbfbf;
        font-weight: 600;
        text-decoration: none;
        -webkit-transition: all 0.4s;
        transition: all 0.4s;
    }

    footer ul li a:hover {
        color: #ffa41f;
    }

    footer ul li.hd {
        color: #a40eff ;
    }

    .newsletter .email {
        background-color: #F4F4F4;
        border: none;
    }

    .flickr-grid {
        float: left;
        width: 32%;
        margin: 0 0.1em .2em;
    }

    .flickr-grid a img {
        width: 100%;
        padding: 0.3em;
        border: 1px solid #333333;
    }

    .newsletter .email {
        outline: none;
        padding: 13px 15px;
        color: #fff;
        font-size: 14px;
        width: 80%;
        background: rgba(0, 0, 0, 0.22);
        border: 1px solid #2d2d2d;
    }

```

```

.newsletter {
    position: relative;
    margin-top: 2em;
}

button.btn1 {
    color: #fff;
    border: none;
    padding: 12px 0;
    text-align: center;
    text-decoration: none;
    background: #a40eff;
    -webkit-transition: 0.5s all;
    -moz-transition: 0.5s all;
    -o-transition: 0.5s all;
    -ms-transition: 0.5s all;
    transition: 0.5s all;
    float: right;
    cursor: pointer;
    width: 20%;
}

```

```
/*--//footer--*/
```

```
/*--/copyright--*/
```

```

.copyright ul li {
    display: inline-block;
    padding: 0 10px;
}

```

```

a.facebook {
    color: #fff;
    font-size: 16px;
}

```

```

a.facebook:hover {
    color: #a40eff;
}

```

```

.copyrighttop {
    float: right;
}

```

```

.copyrightbottom {
    float: left;
}

```

```

}

.copyright {
    background: #141415;
    color: #fff;
    border-top: 1px solid rgba(25, 24, 24, 0.58);
}

.copyrightbottom p {
    color: #fff;
    letter-spacing: 1px;
    font-size: 15px;
    line-height: 28px;
    margin-bottom: 0;
}

.copyrightbottom a {
    color: #a40eff;
    text-decoration: none;
}

.copyrightbottom a:hover {
    color: #fff;
}

.copyrighttop h4 {
    font-size: 0.95em;
}

.banner-1 {
    background: url(../static/images/bg.jpg)no-repeat;
    height: 20vw;
}

.w3layouts_bottom {
    background:url(../static/images/bg3.jpg) no-repeat 0px 0px;
    text-align: center;
    background-size: cover;
    -webkit-background-size: cover;
    -moz-background-size: cover;
    -o-background-size: cover;
    -ms-background-size: cover;
    padding:6em 0;
}

.w3layouts_getin_info h3 {
    color: #fff;
    letter-spacing: 4px;
    font-size: 36px;
    text-align: left;
}

```

```

}
.w3layouts_getin a {
    font-size: 1em;
    color: #fff;
    background:#a40eff;
    padding: 0.7em 2em;
    letter-spacing: 2px;
    display: inline-block;
}
.w3layouts_getin a:hover {
    color: #fff;
    background:#2e1f54;
}
/*-- welcome --*/
.welcome-left h3 {
    color:#2e1f54;
    font-size: 36px;
    letter-spacing: 1px;
}
.welcome-left h4 {
    color: #464646;
    font-size: 17px;
    line-height: 1.8;
    margin: 15px 0;
    font-weight: 700;
    letter-spacing: 1px;
}
.welcome-left p {
    font-size: 15px;
    color: #777;
    line-height: 1.8em;
}
/*-- about-team --*/

.thumbnail.team-agileits {
    border: none;
    text-align: center;
    border-radius: 0;
    margin: 0;
    padding: 0;
}

.team .effectd-caption {
    padding: 20px;
    -webkit-transition: .5s all;
    -moz-transition: .5s all;

```

```

    transition: .5s all;
}
.team h4 {
    color: #a40eff;
    font-size: 22px;
    letter-spacing: 2px;
    font-weight: 600;
}
.social-lsicon a {
    color: #000;
    padding: 0 7px;
    font-size: 16px;
    transition: 0.5s all;
    -webkit-transition: 0.5s all;
    -moz-transition: 0.5s all;
    -o-transition: 0.5s all;
    -ms-transition: 0.5s all;
}

.social-lsicon a:hover {
    color: #a40eff;
    transition: 0.5s all;
    -webkit-transition: 0.5s all;
    -moz-transition: 0.5s all;
    -o-transition: 0.5s all;
    -ms-transition: 0.5s all;
}

/*-- //about-team --*/
/*--services --*/
.w3-services{
    padding:5em 0;
}
.w3-services-left-grid h3 {
    color: #fff;
}
.w3-services-left-grid h4 {
    font-size: 1.4em;
    color: #fff;
    margin-bottom: 1em;
    text-transform: uppercase;
    letter-spacing: 2px;
}
.w3-services-left-grid p, .w3-icon-grid1 p {
    font-size: 15px;
    line-height: 28px;

```

```

    letter-spacing: 0.5px;
    text-transform: capitalize;
    color: #777;
}
.Supp {
    float: left;
    width: 80%;
    margin-left: 5%;
}
.w3-icon-grid1 i {
    font-size: 16px;
    color: #fff;
    float: left;
    width: 40px;
    height: 40px;
    background:#029EB7;
    text-align: center;
    line-height: 40px;
    border-radius: 50%;
}
.w3-icon-grid-gap1:nth-child(2){
    margin: 3em 0;
}
.w3-services-right-grid h3 {
    text-transform: capitalize;
    color: #58575d;
    font-size: 21px;
    font-weight: 600;
    letter-spacing: 1px;
    margin-top: 6px;
    margin-bottom: 15px;
}
.w3-services-left-grid a {
    color: #fff;
    text-transform: capitalize;
    border: 2px solid #fff;
    padding: 10px 20px;
    font-size: 14px;
    letter-spacing: 1px;
}

.w3-services-left-grid a:hover{
    background: #1cc7d0;
    border: 2px solid #1cc7d0;
}
.more{

```



```

        margin:2em 0;
    }
    .w3-services-right-grid {
        padding-left: 4em;
    }
    /*-- what we do --*/
    .w3l_header {
        text-align: center;
        font-size: 3em;
        color: #2c363e;
        text-shadow: 0 1px 2px rgba(0, 0, 0, 0.37);
    }
    .wthree_head_section p {
        font-size: 15px;
        text-align: center;
        margin: 20px auto;
        width: 60%;
        color: #5e5e5e;
        line-height: 1.8em;
        letter-spacing: 1px;
    }
    .wthree_head_section {
        margin-bottom: 5em;
    }
    .about-info-grids {
        text-align: center;
    }
    .bord {
        background: #e8e8e8;
        height: 1px;
        width: 75%;
        margin: 3em auto;
    }
    .about-info.about-info2 {
        border-left: 1px solid #e8e8e8;
        border-right: 1px solid #e8e8e8;
    }
    .about-info-grids p {
        font-size: 15px;
        margin:0;
        color: #777;
        font-weight: 400;
        line-height:1.8em;
    }
    .about-info-grids h4 {
        font-size: 22px;

```

```

    color: #151515;
    letter-spacing: .075em;
    font-weight: 600;
    text-transform: capitalize;
    margin: 20px 0;
}
.about-info-grids i {
    font-size: 36px;
    color: #2e1f54;
}
/*-- //what we do --*/
.w3_agileits_header.two {
    color: #fff;
}
/*-- //services --*/
.w3l_about-img {
    margin-top: -6em;
}
section.stats {
    padding-bottom: 9em;
}
/*--gallery--*/
.gallery-grids {
    padding: 5px;
}
.gallery-box {
    display: block;
    overflow: hidden;
    width: 100%;
    transition: .3s;
    -webkit-transition: .3s;
    -moz-transition: .3s;
    -o-transition: .3s;
    -ms-transition: .3s;
}
/*--image-zoom--*/
img.zoom-img {
    transform: scale(1, 1);
    -webkit-transform: scale(1, 1);
    -moz-transform: scale(1, 1);
    -ms-transform: scale(1, 1);
    -o-transform: scale(1, 1);
    transition-timing-function: ease-out;
    -webkit-transition-timing-function: ease-out;
    -moz-transition-timing-function: ease-out;
    -ms-transition-timing-function: ease-out;
}

```

```

    -o-transition-timing-function: ease-out;
    -webkit-transition-duration: .5s;
    -moz-transition-duration: .5s;
    -ms-transition-duration: .5s;
    -o-transition-duration: .5s;
}
img.zoom-img:hover {
    transform: scale(1.2);
    -webkit-transform: scale(1.2);
    -moz-transform: scale(1.2);
    -ms-transform: scale(1.2);
    -o-transform: scale(1.2);
    -webkit-transition-timing-function: ease-in-out;
    -webkit-transition-duration: 750ms;
    -moz-transition-timing-function: ease-in-out;
    -moz-transition-duration: 750ms;
    -ms-transition-timing-function: ease-in-out;
    -o-transition-timing-function: ease-in-out;
    -ms-transition-duration: 750ms;
    -o-transition-duration: 750ms;
    overflow: hidden;
}
/*--//image-zoom--*/
/*--//gallery--*/
.typo-wthree h4 {
    color: #000000;
    font-size: 1.5em;
    text-transform: capitalize;
}
.bg-flex {
    background-color: #f1cf69;
    border: 1px solid rgb(241, 207, 105);
}
.bg-flex-item {
    background-color: #fff;
    border: 1px solid #d7d8d8;
}

.typo-wthree h5 {
    color: #333;
}

/* //typography */
/*--//contact--*/
.address-left {
    width: 80px;

```

```

height: 80px;
text-align: center;
background: #a40eff;
margin: 0 auto;
border-radius: 50%;
-webkit-border-radius: 50%;
-moz-border-radius: 50%;
-o-border-radius: 50%;
-ms-border-radius: 50%;
}
.address-grid-wthree-agileits {
    text-align: center;
    margin: 0 auto;
}
.address-grid-wthree-agileits span {
    font-size: 1.7em;
    color: #fff;
    margin-top: 27px;
}

.address-right {
    margin-top: 1.2em;
}
.address-right h6 {
    font-size: 1.1em;
    margin-bottom: 0.5em;
}
.contact_grid_right {
    width: 100%;
}
.contact_grid_right input[type="text"],
.contact_grid_right input[type="email"],
.contact_grid_right textarea {
    outline: none;
    padding: 15px 15px;
    font-size: 14px;
    color: #777;
    background: #f7f7f7;
    width: 100%;
    letter-spacing: 1px;
    border: 1px solid #ebeeef;
    margin-top: 1em;
}
.contact_grid_right input[type="text"]:nth-child(2),
.contact_grid_right input[type="email"] {
    margin: 1em 0 0;
}

```

```

}

.contact_grid_right textarea {
  min-height: 150px;
  margin: 1em 0em;
  resize: none;
}

.contact_grid_right input[type="submit"],
.contact_grid_right input[type="reset"] {
  outline: none;
  padding: 20px 0;
  font-size: 14px;
  color: #fff;
  background: #0e0f10;
  width: 22%;
  border: none;
  letter-spacing: 2px;
  text-transform: uppercase;
  -webkit-transition: 0.5s all;
  -moz-transition: 0.5s all;
  -o-transition: 0.5s all;
  -ms-transition: 0.5s all;
  transition: 0.5s all;
  font-weight: 600;
  cursor: pointer;
}

.contact_grid_right input[type="submit"],
.contact_grid_right input[type="reset"]:hover {
  background-color: #a40eff;
}

.contact-left h4 {
  color: #444;
  font-size: 1em;
  margin-bottom: .5em;
  letter-spacing: 1px;
  font-weight: 700;
}

.contact-left p {
  font-size: 1em;
  letter-spacing: 1px;
}

```

```

.contact-text a {
    color: #888;
}

.contact-text a:hover {
    color: #fb383b;
}

.contact_grid_right h6, .contact-left h6 {
    font-size: 1.2em;
    color: #2e1f54;
    margin-bottom: 1.5em;
    letter-spacing: 1px;
    font-weight: 600;
}

.contact-map {
    width: 100%;
}

.contact-map iframe {
    width: 100%;
    height: 300px;
}

.address.row {
    width: 100%;
}

.address-right a {
    color: #777;
}

.address-right p {
    color: #777;
}

/*-- //contact--*/
/* -- Responsive code -- */
@media screen and (max-width: 1440px) {
    .banner-bottom-main {
        width: 79%;
    }
}

@media screen and (max-width: 1366px) {
    .banner-bottom-main {
        width: 83%;
    }
}

@media screen and (max-width: 1280px) {
    .banner-bottom-main {

```

```

    width: 89%;
  }
}
@media screen and (max-width: 1080px) {
.w3layouts_getin_info h3 {
  font-size: 30px;
}
}
@media screen and (max-width: 1050px) {
.banner-bottom-main {
  width: 93%;
  padding: 3em 2em;
  top: -9em;
}
}

@media screen and (max-width: 991px) {
.navbar-toggler {
  padding: 0.2rem 0.5rem;
  background-color: #a40eff;
  border: none;
}
.slider-info {
  height: 57vw;
}
h3.w3ls-title {
  font-size: 3em;
}

.navbar-nav .dropdown-menu {
  text-align: center;
}
h4.agile-title {
width: 100%;
}
.slider-info p {
  width: 100%;
}
.details-w3l {
  margin-top: 2em;
}
.footer-grid:nth-child(3),.footer-grid:nth-child(4){
  margin-top: 1.5em;
}
.copyrighttop {
  float: none;

```

```

    text-align: center;
    margin-bottom: 0.5em;
}
.copyrightbottom {
    float: none;
    text-align: center;
}
.w3layouts_getin_info {
    margin-bottom: 1em;
}
.w3layouts_getin_info h3 {
    text-align:center;
}
.banner-1 {
    height: 26vw;
}
.top-left li {
    margin-left: 0 !important;
}
.banner-bottom-main {
    top: -9em;
    width: 72%;
}
section.services {
    padding-bottom: 35em;
}
section.stats {
    padding-bottom: 2em;
}
.w3l_about-img {
    margin-top: 0em;
}
.section-4 {
    margin-bottom: 1em;
}
.w3_agile_testimonials_grid_right {
    padding: 1em 2em;
}
}

@media screen and (max-width: 800px) {
    .banner-bottom-main {
        width: 90%;
    }
}

```



```

@media screen and (max-width: 768px) {
  .w3_agile_testimonials_grid_right {
    width: 97%;
  }
}

```

```

@media screen and (max-width: 736px) {
  .banner-text {
    padding: 9vw 0 0;
  }
  .jumbotron {
    padding: 0;
  }
  h3.w3ls-title {
    font-size: 2.7em;
  }
  .card-deck .card {
    flex: auto;
  }
  .card:nth-child(2) {
    margin-top: 1.5em;
    margin-bottom: 1.5em;
  }
  h4.agile-title {
    font-size: 2.5em;
    width: 100%;
  }
  .heading-agileinfo {
    font-size: 32px;
    margin-bottom: 0.8em;
  }
  .w3layouts_stats_left p {
    font-size: 2.5em;
  }
  .arrow-container {
    left: 43%;
    top: 34%;
  }
  #small-dialog1 {
    max-width: 560px;
  }
  .about-info.about-info2 {
    border-left: none;
    border-right: none;
  }
  .about-info.about-info2 {

```

```

    margin: 2em 0;
}
.banner-bottom-main {
    width: 71%;
}
section.services {
    padding-bottom: 44em;
}
}
@media screen and (max-width: 667px) {
    .slider-info {
        height: 61vw;
    }
    h3.w3ls-title {
        font-size: 2.5em;
    }
}

@media screen and (max-width: 640px) {
    .banner-1 {
        height: 29vw;
    }
    .banner-bottom-main {
        width: 82%;
    }
}

@media screen and (max-width: 600px) {
    .home h3 {
        font-size: 1.8em;
    }
    .banner-text {
        padding: 9vw 3vw 0;
    }
    h3.agile-title {
        font-size: 2.5em;
    }
    .banner-bottom-main {
        width: 88%;
    }
}

@media screen and (max-width: 568px) {
    h3.w3ls-title {
        font-size: 2.4em;
    }
}

```

```

h3.agile-title {
.col-sm-auto {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 auto;
  flex: 0 0 auto;
  width: auto;
  max-width: none;
}
.col-sm-1 {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 8.333333%;
  flex: 0 0 8.333333%;
  max-width: 8.333333%;
}
.col-sm-2 {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 16.666667%;
  flex: 0 0 16.666667%;
  max-width: 16.666667%;
}
.col-sm-3 {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 25%;
  flex: 0 0 25%;
  max-width: 25%;
}
.col-sm-4 {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 33.333333%;
  flex: 0 0 33.333333%;
  max-width: 33.333333%;
}
.col-sm-5 {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 41.666667%;
  flex: 0 0 41.666667%;
  max-width: 41.666667%;
}
.col-sm-6 {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 50%;
  flex: 0 0 50%;
  max-width: 50%;
}
.col-sm-7 {
  -webkit-box-flex: 0;

```

```

-ms-flex: 0 0 58.333333%;
flex: 0 0 58.333333%;
max-width: 58.333333%;
}
.col-sm-8 {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 66.666667%;
  flex: 0 0 66.666667%;
  max-width: 66.666667%;
}
.col-sm-9 {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 75%;
  flex: 0 0 75%;
  max-width: 75%;
}
.col-sm-10 {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 83.333333%;
  flex: 0 0 83.333333%;
  max-width: 83.333333%;
}
.col-sm-11 {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 91.666667%;
  flex: 0 0 91.666667%;
  max-width: 91.666667%;
}
.col-sm-12 {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 100%;
  flex: 0 0 100%;
  max-width: 100%;
}
.order-sm-first {
  -webkit-box-ordinal-group: 0;
  -ms-flex-order: -1;
  order: -1;
}
.order-sm-last {
  -webkit-box-ordinal-group: 14;
  -ms-flex-order: 13;
  order: 13;
}
.order-sm-0 {
  -webkit-box-ordinal-group: 1;

```

```
-ms-flex-order: 0;
order: 0;
}
.order-sm-1 {
  -webkit-box-ordinal-group: 2;
  -ms-flex-order: 1;
  order: 1;
}
.order-sm-2 {
  -webkit-box-ordinal-group: 3;
  -ms-flex-order: 2;
  order: 2;
}
.order-sm-3 {
  -webkit-box-ordinal-group: 4;
  -ms-flex-order: 3;
  order: 3;
}
.order-sm-4 {
  -webkit-box-ordinal-group: 5;
  -ms-flex-order: 4;
  order: 4;
}
.order-sm-5 {
  -webkit-box-ordinal-group: 6;
  -ms-flex-order: 5;
  order: 5;
}
.order-sm-6 {
  -webkit-box-ordinal-group: 7;
  -ms-flex-order: 6;
  order: 6;
}
.order-sm-7 {
  -webkit-box-ordinal-group: 8;
  -ms-flex-order: 7;
  order: 7;
}
.order-sm-8 {
  -webkit-box-ordinal-group: 9;
  -ms-flex-order: 8;
  order: 8;
}
.order-sm-9 {
  -webkit-box-ordinal-group: 10;
  -ms-flex-order: 9;
```

```
    order: 9;
}
.order-sm-10 {
  -webkit-box-ordinal-group: 11;
  -ms-flex-order: 10;
  order: 10;
}
.order-sm-11 {
  -webkit-box-ordinal-group: 12;
  -ms-flex-order: 11;
  order: 11;
}
.order-sm-12 {
  -webkit-box-ordinal-group: 13;
  -ms-flex-order: 12;
  order: 12;
}
.offset-sm-0 {
  margin-left: 0;
}
.offset-sm-1 {
  margin-left: 8.333333%;
}
.offset-sm-2 {
  margin-left: 16.666667%;
}
.offset-sm-3 {
  margin-left: 25%;
}
.offset-sm-4 {
  margin-left: 33.333333%;
}
.offset-sm-5 {
  margin-left: 41.666667%;
}
.offset-sm-6 {
  margin-left: 50%;
}
.offset-sm-7 {
  margin-left: 58.333333%;
}
.offset-sm-8 {
  margin-left: 66.666667%;
}
.offset-sm-9 {
  margin-left: 75%;
}
```

```

}
.offset-sm-10 {
  margin-left: 83.333333%;
}
.offset-sm-11 {
  margin-left: 91.666667%;
}
}

```

```

@media (min-width: 768px) {
  .col-md {
    -ms-flex-preferred-size: 0;
    flex-basis: 0;
    -webkit-box-flex: 1;
    -ms-flex-positive: 1;
    flex-grow: 1;
    max-width: 100%;
  }
  .col-md-auto {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 auto;
    flex: 0 0 auto;
    width: auto;
    max-width: none;
  }
  .col-md-1 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 8.333333%;
    flex: 0 0 8.333333%;
    max-width: 8.333333%;
  }
  .col-md-2 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 16.666667%;
    flex: 0 0 16.666667%;
    max-width: 16.666667%;
  }
  .col-md-3 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 25%;
    flex: 0 0 25%;
    max-width: 25%;
  }
  .col-md-4 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 33.333333%;

```

```

    flex: 0 0 33.333333%;
    max-width: 33.333333%;
}
.col-md-5 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 41.666667%;
    flex: 0 0 41.666667%;
    max-width: 41.666667%;
}
.col-md-6 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 50%;
    flex: 0 0 50%;
    max-width: 50%;
}
.col-md-7 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 58.333333%;
    flex: 0 0 58.333333%;
    max-width: 58.333333%;
}
.col-md-8 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 66.666667%;
    flex: 0 0 66.666667%;
    max-width: 66.666667%;
}
.col-md-9 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 75%;
    flex: 0 0 75%;
    max-width: 75%;
}
.col-md-10 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 83.333333%;
    flex: 0 0 83.333333%;
    max-width: 83.333333%;
}
.col-md-11 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 91.666667%;
    flex: 0 0 91.666667%;
    max-width: 91.666667%;
}
.col-md-12 {

```



```

-webkit-box-flex: 0;
-ms-flex: 0 0 100%;
flex: 0 0 100%;
max-width: 100%;
}
.order-md-first {
-webkit-box-ordinal-group: 0;
-ms-flex-order: -1;
order: -1;
}
.order-md-last {
-webkit-box-ordinal-group: 14;
-ms-flex-order: 13;
order: 13;
}
.order-md-0 {
-webkit-box-ordinal-group: 1;
-ms-flex-order: 0;
order: 0;
}
.order-md-1 {
-webkit-box-ordinal-group: 2;
-ms-flex-order: 1;
order: 1;
}
.order-md-2 {
-webkit-box-ordinal-group: 3;
-ms-flex-order: 2;
order: 2;
}
.order-md-3 {
-webkit-box-ordinal-group: 4;
-ms-flex-order: 3;
order: 3;
}
.order-md-4 {
-webkit-box-ordinal-group: 5;
-ms-flex-order: 4;
order: 4;
}
.order-md-5 {
-webkit-box-ordinal-group: 6;
-ms-flex-order: 5;
order: 5;
}
.order-md-6 {

```

```

    -webkit-box-ordinal-group: 7;
    -ms-flex-order: 6;
    order: 6;
}
.order-md-7 {
    -webkit-box-ordinal-group: 8;
    -ms-flex-order: 7;
    order: 7;
}
.order-md-8 {
    -webkit-box-ordinal-group: 9;
    -ms-flex-order: 8;
    order: 8;
}
.order-md-9 {
    -webkit-box-ordinal-group: 10;
    -ms-flex-order: 9;
    order: 9;
}
.order-md-10 {
    -webkit-box-ordinal-group: 11;
    -ms-flex-order: 10;
    order: 10;
}
.order-md-11 {
    -webkit-box-ordinal-group: 12;
    -ms-flex-order: 11;
    order: 11;
}
.order-md-12 {
    -webkit-box-ordinal-group: 13;
    -ms-flex-order: 12;
    order: 12;
}
.offset-md-0 {
    margin-left: 0;
}
.offset-md-1 {
    margin-left: 8.333333%;
}
.offset-md-2 {
    margin-left: 16.666667%;
}
.offset-md-3 {
    margin-left: 25%;
}

```

```

.offset-md-4 {
  margin-left: 33.333333%;
}
.offset-md-5 {
  margin-left: 41.666667%;
}
.offset-md-6 {
  margin-left: 50%;
}
.offset-md-7 {
  margin-left: 58.333333%;
}
.offset-md-8 {
  margin-left: 66.666667%;
}
.offset-md-9 {
  margin-left: 75%;
}
.offset-md-10 {
  margin-left: 83.333333%;
}
.offset-md-11 {
  margin-left: 91.666667%;
}
}

```

```

@media (min-width: 992px) {
.col-lg {
  -ms-flex-preferred-size: 0;
  flex-basis: 0;
  -webkit-box-flex: 1;
  -ms-flex-positive: 1;
  flex-grow: 1;
  max-width: 100%;
}
.col-lg-auto {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 auto;
  flex: 0 0 auto;
  width: auto;
  max-width: none;
}
.col-lg-1 {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 8.333333%;
  flex: 0 0 8.333333%;
}

```

```

    max-width: 8.333333%;
}
.col-lg-2 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 16.666667%;
    flex: 0 0 16.666667%;
    max-width: 16.666667%;
}
.col-lg-3 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 25%;
    flex: 0 0 25%;
    max-width: 25%;
}
.col-lg-4 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 33.333333%;
    flex: 0 0 33.333333%;
    max-width: 33.333333%;
}
.col-lg-5 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 41.666667%;
    flex: 0 0 41.666667%;
    max-width: 41.666667%;
}
.col-lg-6 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 50%;
    flex: 0 0 50%;
    max-width: 50%;
}
.col-lg-7 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 58.333333%;
    flex: 0 0 58.333333%;
    max-width: 58.333333%;
}
.col-lg-8 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 66.666667%;
    flex: 0 0 66.666667%;
    max-width: 66.666667%;
}
.col-lg-9 {
    -webkit-box-flex: 0;

```

```

-ms-flex: 0 0 75%;
flex: 0 0 75%;
max-width: 75%;
}
.col-lg-10 {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 83.333333%;
  flex: 0 0 83.333333%;
  max-width: 83.333333%;
}
.col-lg-11 {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 91.666667%;
  flex: 0 0 91.666667%;
  max-width: 91.666667%;
}
.col-lg-12 {
  -webkit-box-flex: 0;
  -ms-flex: 0 0 100%;
  flex: 0 0 100%;
  max-width: 100%;
}
.order-lg-first {
  -webkit-box-ordinal-group: 0;
  -ms-flex-order: -1;
  order: -1;
}
.order-lg-last {
  -webkit-box-ordinal-group: 14;
  -ms-flex-order: 13;
  order: 13;
}
.order-lg-0 {
  -webkit-box-ordinal-group: 1;
  -ms-flex-order: 0;
  order: 0;
}
.order-lg-1 {
  -webkit-box-ordinal-group: 2;
  -ms-flex-order: 1;
  order: 1;
}
.order-lg-2 {
  -webkit-box-ordinal-group: 3;
  -ms-flex-order: 2;
  order: 2;
}

```

```
}  
.order-lg-3 {  
  -webkit-box-ordinal-group: 4;  
  -ms-flex-order: 3;  
  order: 3;  
}  
.order-lg-4 {  
  -webkit-box-ordinal-group: 5;  
  -ms-flex-order: 4;  
  order: 4;  
}  
.order-lg-5 {  
  -webkit-box-ordinal-group: 6;  
  -ms-flex-order: 5;  
  order: 5;  
}  
.order-lg-6 {  
  -webkit-box-ordinal-group: 7;  
  -ms-flex-order: 6;  
  order: 6;  
}  
.order-lg-7 {  
  -webkit-box-ordinal-group: 8;  
  -ms-flex-order: 7;  
  order: 7;  
}  
.order-lg-8 {  
  -webkit-box-ordinal-group: 9;  
  -ms-flex-order: 8;  
  order: 8;  
}  
.order-lg-9 {  
  -webkit-box-ordinal-group: 10;  
  -ms-flex-order: 9;  
  order: 9;  
}  
.order-lg-10 {  
  -webkit-box-ordinal-group: 11;  
  -ms-flex-order: 10;  
  order: 10;  
}  
.order-lg-11 {  
  -webkit-box-ordinal-group: 12;  
  -ms-flex-order: 11;  
  order: 11;  
}
```

```

.order-lg-12 {
  -webkit-box-ordinal-group: 13;
  -ms-flex-order: 12;
  order: 12;
}
.offset-lg-0 {
  margin-left: 0;
}
.offset-lg-1 {
  margin-left: 8.333333%;
}
.offset-lg-2 {
  margin-left: 16.666667%;
}
.offset-lg-3 {
  margin-left: 25%;
}
.offset-lg-4 {
  margin-left: 33.333333%;
}
.offset-lg-5 {
  margin-left: 41.666667%;
}
.offset-lg-6 {
  margin-left: 50%;
}
.offset-lg-7 {
  margin-left: 58.333333%;
}
.offset-lg-8 {
  margin-left: 66.666667%;
}
.offset-lg-9 {
  margin-left: 75%;
}
.offset-lg-10 {
  margin-left: 83.333333%;
}
.offset-lg-11 {
  margin-left: 91.666667%;
}
}
@media (min-width: 1200px) {
.col-xl {
  -ms-flex-preferred-size: 0;
  flex-basis: 0;

```

```

-webkit-box-flex: 1;
-ms-flex-positive: 1;
flex-grow: 1;
max-width: 100%;
}
.col-xl-auto {
-webkit-box-flex: 0;
-ms-flex: 0 0 auto;
flex: 0 0 auto;
width: auto;
max-width: none;
}
.col-xl-1 {
-webkit-box-flex: 0;
-ms-flex: 0 0 8.333333%;
flex: 0 0 8.333333%;
max-width: 8.333333%;
}
.col-xl-2 {
-webkit-box-flex: 0;
-ms-flex: 0 0 16.666667%;
flex: 0 0 16.666667%;
max-width: 16.666667%;
}
.col-xl-3 {
-webkit-box-flex: 0;
-ms-flex: 0 0 25%;
flex: 0 0 25%;
max-width: 25%;
}
.col-xl-4 {
-webkit-box-flex: 0;
-ms-flex: 0 0 33.333333%;
flex: 0 0 33.333333%;
max-width: 33.333333%;
}
.col-xl-5 {
-webkit-box-flex: 0;
-ms-flex: 0 0 41.666667%;
flex: 0 0 41.666667%;
max-width: 41.666667%;
}
.col-xl-6 {
-webkit-box-flex: 0;
-ms-flex: 0 0 50%;
flex: 0 0 50%;

```



```

    max-width: 50%;
}
.col-xl-7 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 58.333333%;
    flex: 0 0 58.333333%;
    max-width: 58.333333%;
}
.col-xl-8 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 66.666667%;
    flex: 0 0 66.666667%;
    max-width: 66.666667%;
}
.col-xl-9 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 75%;
    flex: 0 0 75%;
    max-width: 75%;
}
.col-xl-10 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 83.333333%;
    flex: 0 0 83.333333%;
    max-width: 83.333333%;
}
.col-xl-11 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 91.666667%;
    flex: 0 0 91.666667%;
    max-width: 91.666667%;
}
.col-xl-12 {
    -webkit-box-flex: 0;
    -ms-flex: 0 0 100%;
    flex: 0 0 100%;
    max-width: 100%;
}
.order-xl-first {
    -webkit-box-ordinal-group: 0;
    -ms-flex-order: -1;
    order: -1;
}
.order-xl-last {
    -webkit-box-ordinal-group: 14;
    -ms-flex-order: 13;
}

```

```
    order: 13;
}
.order-xl-0 {
  -webkit-box-ordinal-group: 1;
  -ms-flex-order: 0;
  order: 0;
}
.order-xl-1 {
  -webkit-box-ordinal-group: 2;
  -ms-flex-order: 1;
  order: 1;
}
.order-xl-2 {
  -webkit-box-ordinal-group: 3;
  -ms-flex-order: 2;
  order: 2;
}
.order-xl-3 {
  -webkit-box-ordinal-group: 4;
  -ms-flex-order: 3;
  order: 3;
}
.order-xl-4 {
  -webkit-box-ordinal-group: 5;
  -ms-flex-order: 4;
  order: 4;
}
.order-xl-5 {
  -webkit-box-ordinal-group: 6;
  -ms-flex-order: 5;
  order: 5;
}
.order-xl-6 {
  -webkit-box-ordinal-group: 7;
  -ms-flex-order: 6;
  order: 6;
}
.order-xl-7 {
  -webkit-box-ordinal-group: 8;
  -ms-flex-order: 7;
  order: 7;
}
.order-xl-8 {
  -webkit-box-ordinal-group: 9;
  -ms-flex-order: 8;
  order: 8;
}
```

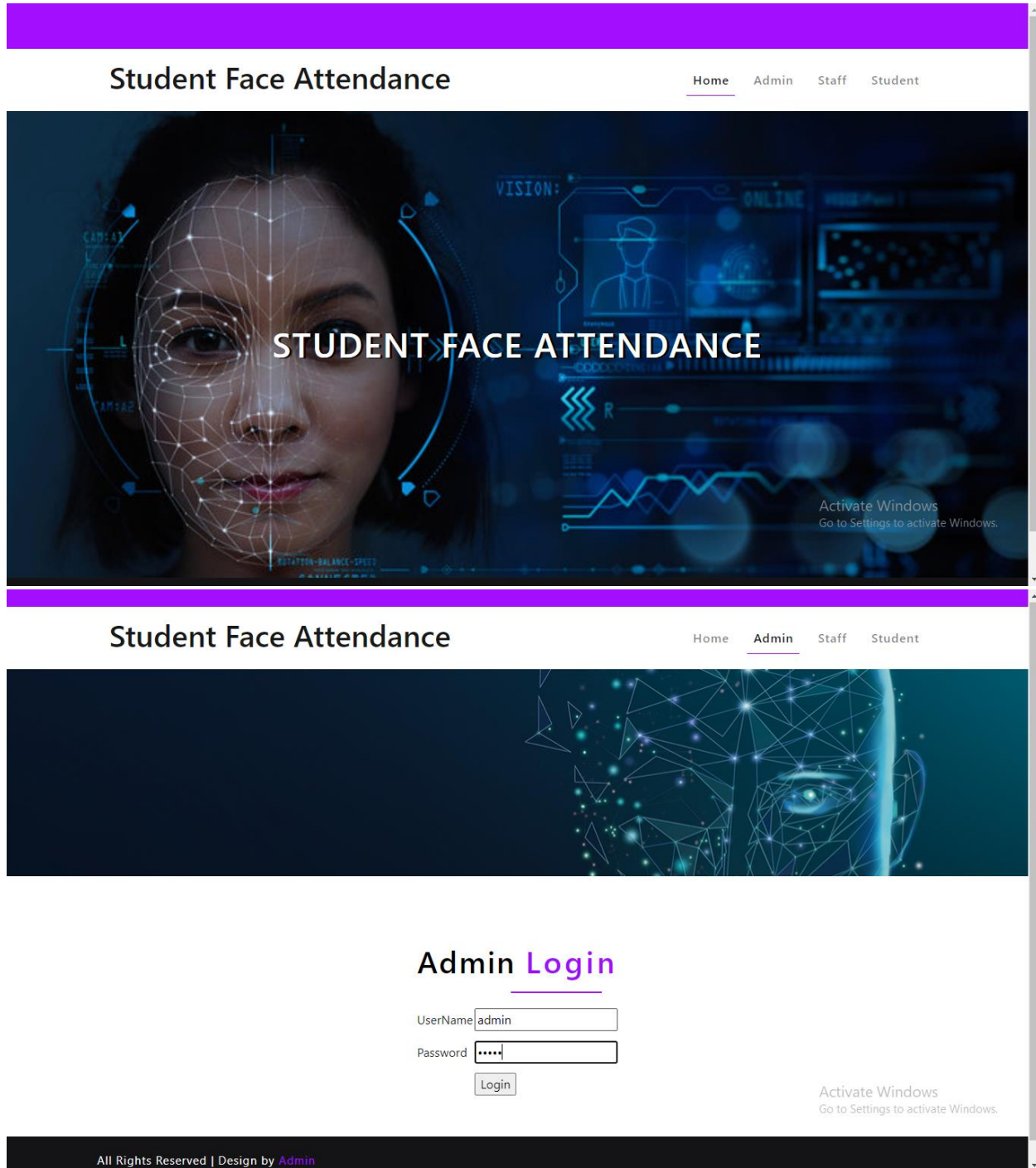
```

}
.order-xl-9 {
  -webkit-box-ordinal-group: 10;
  -ms-flex-order: 9;
  order: 9;
}
.order-xl-10 {
  -webkit-box-ordinal-group: 11;
  -ms-flex-order: 10;
  order: 10;
}
.order-xl-11 {
  -webkit-box-ordinal-group: 12;
  -ms-flex-order: 11;
  order: 11;
}
.order-xl-12 {
  -webkit-box-ordinal-group: 13;
  -ms-flex-order: 12;
  order: 12;
}

}
.offset-xl-0 {
  margin-left: 0;
}
.offset-xl-1 {
  margin-left: 8.333333%;
}
.offset-xl-2 {
  margin-left: 16.666667%;
}
.offset-xl-3 {
  margin-left: 25%;
}
.offset-xl-4 {
  margin-left: 33.333333%;
}
.offset-xl-5 {
  margin-left: 41.666667%;
}
.offset-xl-6 {
  margin-left: 50%;
}
.offset-xl-7 {
  margin-left: 58.333333%;
}

```

B) SCREENSHOT





Add Staff

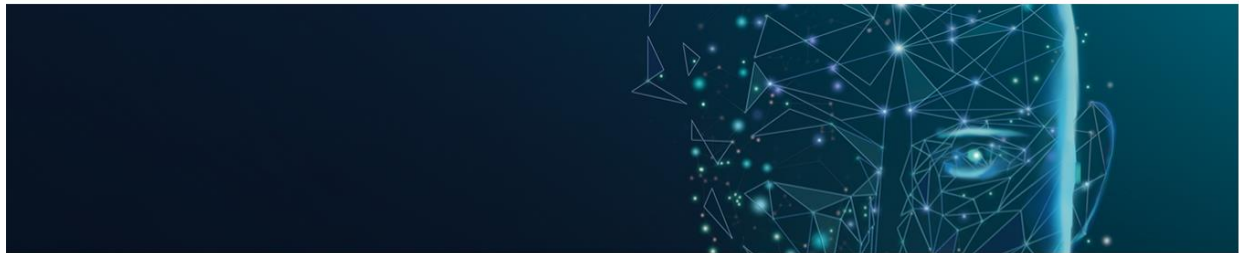
Staff Name	<input type="text" value="yoga"/>
Department	<input type="text" value="cs"/>
Qualification	<input type="text" value="ME"/>
Gender	<input type="text" value="Male"/>
Designation	<input type="text" value="Assistant professor"/>
Email	<input type="text" value="yoga@gmail.com"/>
Username	<input type="text" value="yoga"/>
Password	<input type="password" value="..."/>
<input type="button" value="Submit"/>	

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Student Face Attendance

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Student Details

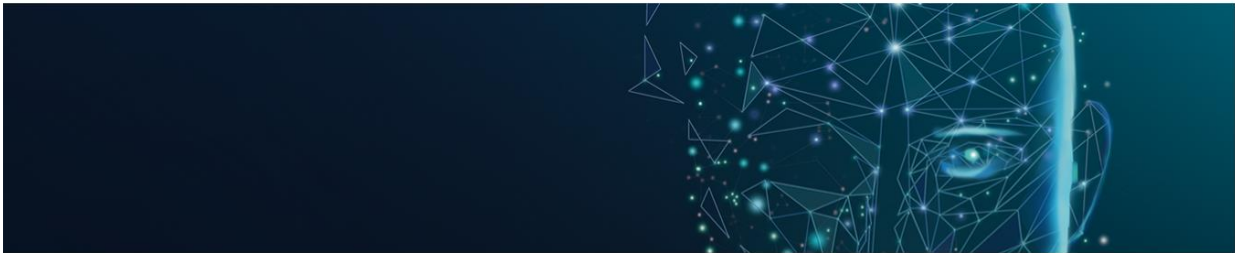
Reg.No	Name	Degree	Dept	DOB	Gender
101	raj	be	cs	14-07-1994	Male
102	karthika	be	cs	15-15-1	Male
103	sachin	be	cs	14-07-1994	Male

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Student Face Attendance

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Student Attendance

Class

Subject

Hour


Date

Submit

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Student Face Attendance

HomeAdd StaffStudentAttendanceLogout



Student Attendance

Class	Subject	Hour	Total Hour(Sec)	Date	Start	Student	Present
a	english	1	7200	2022-04-10	18:28:50	101	71

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110



Staff Login

UserName

Password

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Add Student

Register No

Name

Degree

Department

Gender

DOB

Password

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Add Student



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Student Details

Reg.No	Name	Degree	Dept	DOB	Gender
101	raj	be	cs	14-07-1994	Male
102	karthika	be	cs	15-15-1	Male
103	sachin	be	cs	14-07-1994	Male
104	mani	be	cs	14-07-1994	Male

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View Attendance

Class	<input type="text" value="a"/>
Subject	<input type="text" value="english"/>
Hour	<input type="text" value="1"/>
Date	<input type="text" value="2022-04-10"/>
<input type="button" value="Submit"/>	

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Attendance Details

Class	Subject	Hour	Total Hour(Sec)	Date	Start	Student	Present
a	english	1	7200	2022-04-10	18:28:50	101	71

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Student Login

Roll No

Department

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Attendance Details

Class	Subject	Hour	Total Hourse(Sec)	Date	Start	Student	Present
a	english	4	7200	2022-04-10	19:24:57	104	102

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