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REVIEW ON THE ONLINE VOTING SYSTEM USING FACE RECOGNITION AND OTP

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Abstract: The basic idea of this system is to create an Online Voting System that will help to suppress deceive of the manual voting system and also the prior versions of online voting by camera for Face Recognition and OTP generation. We are also implementing location free voting system to the voters for whom it is not possible to come at the voting location (hometown). Here we propose a system that includes multiple layers of verification to ensure the reliability of the device which includes face verification and then OTP verification with validation data. Each voter can access to the system only when being recognized and checked with the given database of enlist voters. Once the corresponding face is matched with the information provided, the voter will be allowed to proceed for choosing their preferred candidate from the panel.

Keywords - Tkinter, Spyder, Image Processing, Python, Voting System, Face Recognition, MySQL, OTP.

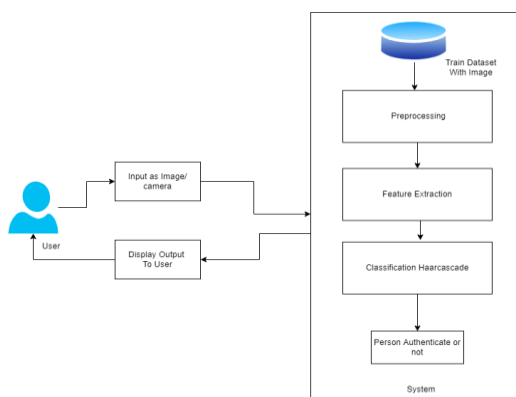
I. INTRODUCTION

As per the records of TOI 24 Jan, 2009 11 lakhs fake votes were observed in Delhi. Then according to India News June 2013 : 30000 illegal voters were found in election commission under Sheila Dikshit constituency. Another news which was alleged by LJP(LokJanshakti Party) Chief, Ram Vilas Paswan saying that Bihar election were having 30

Electronic voting technology intends to speed the counting of ballots, reduce the cost of paying staff to count votes manually and can provide improved accessibility for disabled voters. Also in the long term, expenses are expected to decrease. Results can be reported and published faster.

Secure Online Voting System with Multi Security the usage of Biometric and Steganography, the simple concept is to merge the name of the game key with the duvet picture on the premise of center picture. The end result of this technique produces a stego picture which appears pretty just like the duvet picture. The center picture is a biometric measure, which include a fingerprint picture. The stego picture is extracted on the server facet to carry out the voter authentication function. It used mystery message with 288 bit length. As the real mystery key's by no means embedded with inside the stego picture, there can be no danger of predicting mystery key from it.

II. SYSTEM ARCHITECTURE



III. MODULE

• Admin

In this module, the Admin has to log in by using valid user name and password. After login successful he can do some operations such as View All Users and Authorize, View All E-Commerce Website and Authorize, View All Products and Reviews, View All Products Early Reviews, View All Keyword Search Details, View All Products Search Ratio, View All Keyword Search Results, View All Product Review Rank Results.

• View and Authorize Users

In this module, the admin can view the list of users who all registered. In this, the admin can view the user's details such as, user name, email, address and 17 admin authorizes the users. • View Charts Results

View All Products Search Ratio, View All Keyword Search Results, View All Product Review Rank Results.

• Ecommerce User

In this module, there are n numbers of users are present. User should register before doing any operations. Once user registers, their details will be stored to the database. After registration successful, he has to login by using authorized user name and password. Once Login is successful user will do some operations like Add Products, View All Products with reviews, View All Early Product's reviews, View All Purchased Transactions.

• End User

In this module, there are n numbers of users are present. User should register before doing any operations. Once user registers, their details will be stored to the database. After registration successful, he has to login by using authorized user name and password. Once Login is successful user will do some operations like Manage Account, Search Products by keyword and Purchase, View Your Search Transactions, View.

IV. SOFTWARE INFORMATION**V. PYTHON:**

Python is an interpreted, high-level and general-purpose programming language. Created by Guido van Rossum and first released in 1991, Python's design philosophy emphasizes code readability with its notable use of significant whitespace. Its language constructs and object-oriented approach aim to help programmers write clear, logical code for small and large-scale projects. Python is dynamically typed and garbage-collected. It supports multiple programming paradigms, including structured (particularly, procedural), object-oriented, and functional programming. Python is often described as a "batteries included" language due to its comprehensive standard library. Python was created in the late 1980s as a successor to the ABC language. Python 2.0, released in 2000, introduced features like list comprehensions and a garbage collection system with reference counting. Python 3.0, released in 2008, was a major revision of the language that is not completely backward-compatible, and much Python 2 code does not run unmodified on Python 3. The Python 2 language was officially discontinued in 2020 (first planned for 2015), and "Python 2.7.18 is the last Python 2.7 release and therefore the last Python 2 release." [30] No more security patches or other improvements will be released for it. With Python 2's end-of-life, only Python 3.6.x and later are supported. Python interpreters are available for many operating systems. A global community of programmers develops and maintains CPython, a free and open-source reference implementation. A non-profit organization, the Python Software Foundation, manages and directs resources for Python and CPython development. Python was conceived in the late 1980s by Guido van Rossum at Centrum Wiskunde Informatica (CWI) in the Netherlands as a successor to the ABC language (itself inspired by SETL), capable of exception handling and interfacing with the Amoeba operating system. Its implementation began in December 1989. Van Rossum shouldered sole responsibility for the project, as the lead developer, until 12 July 2018, when he announced his "permanent vacation" from his responsibilities as Python's Benevolent Dictator For Life, a title the Python community bestowed upon him to reflect his long-term commitment as the project's chief decision-maker. He now shares his leadership as a member of a five-person steering council. In January 2019, active Python core developers elected Brett Cannon, Nick Coghlan, Barry Warsaw, Carol Willing and Van Rossum to a five-member "Steering Council" to lead the project.

VI. ANACONDA:

Anaconda is a free and open-source distribution of the Python and R programming languages for scientific computing (data science, machine learning applications, large-scale data processing, predictive analytics, etc.), that aims to simplify package management and deployment. The distribution includes data-science packages suitable for Windows, Linux, and macOS. It is developed and maintained by Anaconda, Inc., which was founded by Peter Wang and Travis Oliphant in 2012. As an Anaconda, Inc. product, it is also known as Anaconda Distribution or Anaconda Individual Edition, while other products from the company are Anaconda Team Edition and Anaconda Enterprise Edition, both of which are not free. Package versions in Anaconda are managed by the package management system conda. This package manager was spun out as a separate open-source package as it ended up being useful on its own and for other things than Python. There is also a small, bootstrap version of Anaconda called Miniconda, which includes only conda, Python, the packages they depend on, and a small number of other packages. Anaconda distribution comes with over 250 packages automatically installed, and over 7,500 additional open-source packages can be installed from PyPI as well as the conda package and virtual environment manager. It also includes a GUI, Anaconda Navigator, as a graphical alternative to the command line interface (CLI). The big difference between conda and the pip package manager is in how package dependencies are managed, which is a significant challenge for Python data science and the reason conda exists. When pip installs a package, it automatically installs any dependent Python packages without checking if these conflict with previously installed packages [citation needed]. It will install a package and any of its dependencies regardless of the state of the existing installation [citation needed]. Because of this, a user with a working installation of, for example, Google Tensorflow, can find that it stops working having used pip to install a different package that requires a different version of the dependent numpy library than the one used by Tensorflow. In some cases, the package may appear to work but produce different results in detail. In contrast, conda analyses the current environment including everything currently installed, and, together with any version limitations specified (e.g. the user may wish to have Tensorflow version 2.0 or higher), works out how to install a

compatible set of dependencies, and shows a warning if this cannot be done. Open source packages can be individually installed from the Anaconda repository, Anaconda Cloud (anaconda.org), or the user's own private repository or mirror, using the conda install command. Anaconda, Inc. compiles and builds the packages available in the Anaconda repository itself, and provides binaries for Windows 32/64 bit, Linux 64 bit and MacOS 64-bit. Anything available on PyPI may be installed into a conda environment using pip, and conda will keep track of what it has installed itself and what pip has installed. Custom packages can be made using the conda build command, and can be shared with others by uploading them to Anaconda Cloud, PyPI or other repositories. The default installation of Anaconda2 includes Python 2.7 and Anaconda3 includes Python 3.7. However, it is possible to create new environments that include any version of Python packaged with conda.

VII. SPYDER:

Spyder is an open-source cross-platform IDE. The Python Spyder IDE is written completely in Python. It is designed by scientists and is exclusively for scientists, data analysts, and engineers. It is also known as the Scientific Python Development IDE and has a huge set of remarkable features which are discussed below.

VIII. FEATURES

- Supports all the IPython magic commands
- It provides real-time code introspection (The ability to examine what functions, keywords, and classes are, what they are doing and what information they contain)
- Availability of breakpoints (debugging and conditional breakpoints) Interactive execution which allows you to run line, file, cell, etc.
- Navigation through cells, functions, blocks, etc can be achieved through the Outline Explorer
- Inline display for graphics produced using Matplotlib
- Also provides features such as help, file explorer, find files, etc
- Can clear variables automatically (or enter debugging)
- Run configurations for working directory selections, command-line options, current/ dedicated/ external console, etc.

IX. CONCLUSION

Our proposed solution is machine learning based with face detection which allows the voter to register and he/she can vote from anywhere irrespective of the location. This system provides security and also avoid casting of the multiple vote by same person. This system is more reliable in which we can vote from multiple locations. It also minimize work, human requirements and time resources

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