Access Aid Hub: Divyang Welfare in PCMC with ASP.NET MVC

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Abstract:
The PCMC Divyang KYC Project aims to streamline and enhance the Know Your Customer (KYC) process for persons with disabilities (Divyang) within the Pimpri-Chinchwad Municipal Corporation (PCMC) region. Recognizing the unique challenges faced by individuals with disabilities in accessing and completing traditional KYC procedures, this project seeks to leverage technology to create an inclusive and efficient system.

Introduction:
Access Aid Hub is a pioneering initiative aimed at enhancing the welfare and accessibility of persons with disabilities (Divyang) in the Pimpri-Chinchwad Municipal Corporation (PCMC) area. At the core of this project lies the integration of advanced technology and meticulous Know Your Customer (KYC) verification process to ensure the efficient delivery of services and support to the Divyang community. By leveraging KYC verification, the project aims to authenticate the identity of Divyang individuals accurately, facilitating seamless access to the benefits they are entitled to. The KYC verification process serves as a cornerstone of this project, ensuring the authenticity and integrity of the data collected. Access Aid Hub is not just a project, it’s a commitment to uphold the rights and dignity of persons with disabilities. Though effective KYC verification and leveraging technology, this initiative aspires to be a beacon of hope, empowerment, and inclusion for the Divyang community in PCMC.

Language Learning:
Access Aid Hub is designed to provide a user-friendly and accessible interface for Divyang individuals to engage with language learning materials, track their process, and receive personalized support. Utilizing ASP.NET MVC, Web API, SQL server, the platform offers a responsive and interactive web application that can be accessed from any device with an internet connection, ensuring flexibility and convenience for users.
SQL is a robust backend system, which stores and manages user data, learning resources, and progress tracking information. The Scalability and reliability of SQL server, the platform can efficiently handle large volumes of data while ensuring data security and integrity.

WEB API to facilitate seamless communication between the fronted and backend components, enabling real-time updates and interactions for users. Th

ASP.NET MVC stands for Model-View-Controller, which is a design pattern commonly used in building user interfaces. MVC pattern helps in creating modular, maintainable, scalable applications and also fetch data from models.

CASE Study of Access Aid Hub Divyang welfare in PCMC with ASP.NET MVC:

Problem Statement:

Person with disabilities (Divyang) in the Pimpri-Chinchwad-Municipal-Corporation region face significant challenges in accessing welfare services and completing traditional Know Your Customer (KYC) procedures. Existing KYC verification process often lack inclusivity and efficiency, leading to barriers in accessing essential benefits and support for that Divyang community. Moreover, the absence of a centralized platform hampers the coordination and delivery of welfare services tailored to the unique needs of individuals with disabilities.

Solution Overview:

The solution overview for the Access Aid Hub: Divyang Welfare in PCMC project involves developing a comprehensive platform that integrates advanced technology with a user-centric approach to streamline KYC verification processes and enhance accessibility for individuals with disabilities. This platform serves as a centralized portal for Divyang individuals to access welfare services, KYC documents and receive reports. The KYC verification module enables Divyang individuals to securely upload and submit identification documents through the Access Aid Hub platform. Facial recognition technology is integrated into the KYC verification process to provide an additional layer of authentication. Implements robust security measures to safeguard the confidentiality and integrity of personal data collected during the KYC verification process.

Technologies Used:

- Asp.Net MVC: Utilized for developing the web application, providing a robust and scalable architecture for building the Access Aid Hub platform.
- C# Programming: Employed for backend development, to including implementing business logic, data management, and integration with external services.
- HTML5/CSS3/JavaScript: Used for fronted development to create a responsive and interactive user interface, ensuring accessibility and use of ease of use for Divyang individuals.
- SQL Server: SQL server stores and manages user data, the platform can efficiently handle large volumes of data while ensuring data security and integrity.
- Postman Tool: To fetch API’s
Implementation Steps:

Data Collection and processing: Collect relevant data from Divyang individuals for KYC purposes, ensuring compliance with privacy regulations and ethical regulations. Preprocess the collected data, including personal information, identification documents, and any additional details required for KYC verification.

KYC Verification Module: Develop a KYC verification module within the Access Aid Hub platform using ASP.NET MVC. Implement features for uploading and processing KYC documents securely.

Facial Recognition Integration: Integrate the facial recognition module developed in the previous steps into the KYC verification process. Enhance the KYC verification process by adding facial recognition as an additional authentication layer.

User Interface Enhancement: Design user-friendly interfaces for Divyang individuals to interact with the Access Aid Hub platform.

Backend Development: Implement the backend logic for managing KYC data, user profiles, and authentication processes. Integrate database systems to store KYC information securely and ensure data integrity.

Testing And Validation: Conduct testing of the integrated system to verify the accuracy and reliability of KYC verification and facial recognition functionalities.

Deployment And Maintenance: Deploy the Access Aid Hub platform with the integrated KYC verification module and facial recognition capabilities. Provide ongoing maintenance and support to address any issues and incorporate updates or enhancement based on user feedback.

Result:

The implementation of the Access Aid Hub project has successfully streamlined the Know Your Customer (KYC) verification and enhanced accessibility for persons with disabilities (Divyang) in the Pimpri-Chinchwad Municipal Corporation (PCMC) area. Through the utilization of ASP.NET MVC technology and a user-centric approach, the project has created a centralized portal for Divyang individuals to access welfare services, KYC documents, and receive reports. The platform features a user-friendly interface, robust data management, and security measures, ensuring compliance with privacy regulations and ethical standards. Testing and validation have been conducted, leading to the successful deployment of the platform. Overall, Access Aid Hub project has significantly improved welfare services and accessibility for the Divyang community in PCMC promoting inclusivity and empowerment. Overall, the project achieved its goal of leveraging technology to create an inclusive and efficient system for KYC verification and welfare service delivery, making a meaningful impact on the lives of individuals with disabilities in the PCMC community.

Conclusion:

The Access Aid Hub project marks a significant milestones in the advancement of welfare services the accessibility for persons with disabilities (Divyang) in the Pimpri-Chinchwad Municipal Corporation (PCMC) area. Through the integration of ASP.NET MVC technology and a user-centric approach, the project has effectively addressed the challenges faced by the Divyang community in accessing essential services and completing traditional Know Your Customer (KYC) procedures. By streamlining the KYC verification process and providing a centralized portal for accessing welfare services, the project has not only improved efficiency but also promoted inclusivity and empowerment among Divyang individuals. The user-friendly interface, robust data management, and security measures ensure a seamless and secure experience for users, while rigorous testing and validation have validated the reliability and accuracy of the platform. The successful deployment of the Access Aid Hub platform signifies a commitment to upholding the rights and dignity of individuals with disabilities, serving as a beacon of hope and inclusion within the PCMC community. Moving forward, continued maintenance and support will be provided to address any
emerging needs and incorporate enhancements based on user feedback, ensuring the sustained effectiveness and impact of the project in improving the lives of Divyang individuals.

References: