**TITLE: Bilingual electronics queuing system with accessibility capabilities for physical impaired people**

**ABSTRACT**

Today’s world is a world of services, service centers have continuously found ways to manage customers or ques to ensure quality service provision. However, they still face challenges in handling them, arise of the technology of **que management** systems has brought gain to the pain which was earlier felt but leaving behind the consideration of individuals which are **physical impaired** people, their involvement and their ability to access the service as very interactive as compared to a person without physical impairment.

The proposed system tends to serve for those earlier mentioned limitations, to provide a physical impaired people-friendly interactive involvement of the person to the fore given services by the service center.

Firstly, giving the ability to interact by **voice** to the token printing kiosk for **visual impaired** individuals where their preferred service choice together with the token number special or labeled as special group will be announced right after the token has been printed and to serve for the priority issue every counter shall be individually notified on the labeled token. This feature will involve **touchscreen technology** for non-impaired people and also utilization of **AI models for speech and voice** as a feature for the special group.

Secondly providing a friendly system to the individuals who understand **sign language** this contains from the interaction at printer point to the visuals on the display when waiting for next customer mention.

Those salient features will bring the gains of, priority considerations to the special group or people who are physically impaired, involvement of the special group to an experience closer to a non-impaired person and also proper understanding for the people who use sign language.

**PROJECT PLAN**

**Project objectives:**

* Enable visually impaired individuals to interact with the token printer through audio guidance
* Implement a tagging or labelling system for special groups to notify all counters for prioritization
* To integrate a feature to accommodate individuals hearing impairments (sign language)
* Integrate a back-up power (Battery) module in case of power cut-off

**Hardware requirements**

* Touch screen technology
* Back-up power module

**Software requirements/integration**

* Audio feedback for visually impaired
* Modify token database to include special group tag
* Visible sign language instructions

**Expected outcomes**

* Increased accessibility to a wider range of users including physical impaired individuals.
* Improved user experience due to the introduction of labelled token for priority reasons
* A reliable system in period of power shortage

**Timeline and Milestones**

**Before** progress presentation**, week 7**

Phase 1: get the last/previous system up and running

Phase 2: Research and selection of hardware components for accessibility features like audio outputs

Phase 3: Software development to integrate audio feedback and special group tag notifications