

Project Plan and System Design Document

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Project Plan

Work Breakdown Structure

Phase One - Feasibility and Requirements gathering.	
1.1	Conduct preliminary analysis of the current system
1.2	Survey directors of registrar, and open enrollment centers
1.3	Research reputable Kiosk vendors
1.4	Hold stakeholder and sponsor meeting to discuss preliminary analysis data, survey data, selection of kiosk vendor, and project requirements.
1.5	Define project requirements

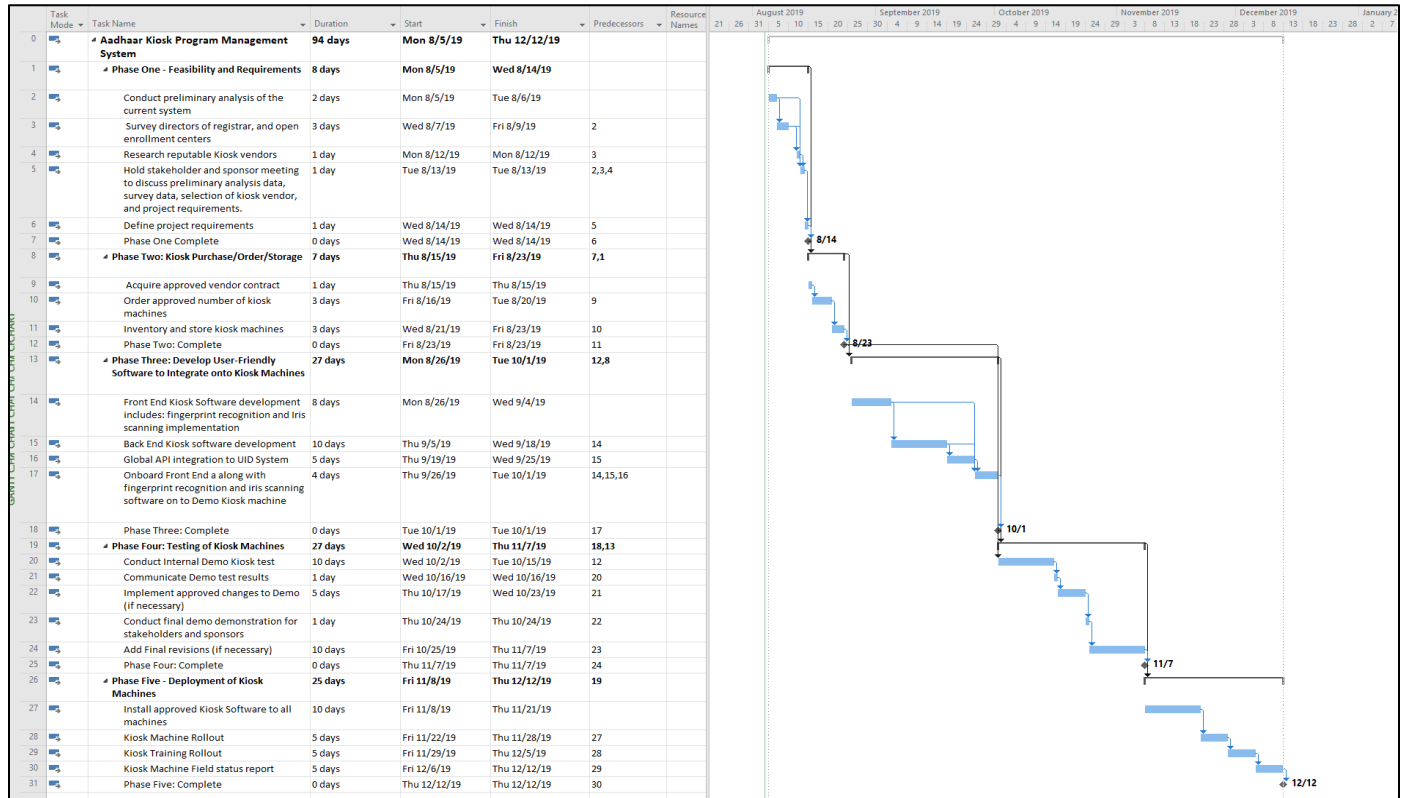
Phase Two - Kiosk Purchase/Order/Storage	
2.1	Acquire approved vendor contract
2.2	Order approved number of kiosk machines
2.3	Inventory and store kiosk machines

Phase Three – Develop User-Friendly Software to Integrate onto Kiosk Machines	
3.1	Front End Kiosk Software development includes: fingerprint recognition and Iris scanning implementation
3.2	Back end Kiosk software development
3.3	Global API integration to UID system
3.4	Onboard Front End a along with fingerprint recognition and iris scanning software on to Demo Kiosk machine

Phase Four - Testing of Kiosk Machines	
4.1	Conduct Internal Demo Kiosk test
4.2	Communicate Demo test results
4.3	Implement approved changes to Demo (if necessary)
4.4	Conduct final demo demonstration for stakeholders and sponsors
4.5	Add Final revisions (if necessary)

Phase Five - Deployment of Kiosk Machines	
5.1	Install approved Kiosk Software to all machines
5.2	Kiosk Machine Rollout
5.3	Kiosk Training Rollout
5.4	Kiosk Machine Field status report

Work Breakdown Structure Gantt Chart



Timeline

This project maintains and will adhere to a 94 day timeframe. The project start date is August 5, 2019 the project end date is December 12, 2019. The table below illustrates the phases of the project and the duration and or number of days it will take to complete.

Task Name	Duration	Start	Finish
Aadhaar Kiosk Program Management System	94 days	Mon 8/5/19	Thu 12/12/19
▷ Phase One - Feasibility and Requirements	8 days	Mon 8/5/19	Wed 8/14/19
▷ Phase Two: Kiosk Purchase/Order/Storage	7 days	Thu 8/15/19	Fri 8/23/19
▷ Phase Three: Develop User-Friendly Software to Integrate onto Kiosk Machines	27 days	Mon 8/26/19	Tue 10/1/19
▷ Phase Four: Testing of Kiosk Machines	27 days	Wed 10/2/19	Thu 11/7/19
▷ Phase Five - Deployment of Kiosk Machines	25 days	Fri 11/8/19	Thu 12/12/19

Dependencies

Important dependencies to outline within this project are the task within phase 1.4 which refers to holding a meeting with stakeholders and sponsors regarding the feasibility study report, vendor selection, and defining the projects requirements. If project task 1.1 to 1.3 noted in the above work breakdown structure are not completed the meeting would have no data analysis for stakeholders and sponsors to make informed decisions. This dependency is also outlined in the Gantt Chart under task 5 and within the predecessor column task 2, tasks 3, task 4 are represented as the task to complete before moving on.

Use of tools

The Software tool used in the development of the Work Breakdown Structure Gantt chart is Microsoft Project. According to Wikipedia” Microsoft Project is a project management software product, developed and sold by Microsoft. It is designed to assist a project manager in developing a schedule, assigning resources to tasks, tracking progress, managing the budget, and analyzing workloads.” (Wikipedia, 2019)

System Design Document

Introduction

The overall purpose of this project is to eliminate long lines and long wait times within open enrollment and registrar centers in India’s rural and urban neighborhoods. The scope of this project is to provide registrar and open enrollment centers with fully functional kiosk machines capable of verifying current enrollment status and acquiring fingerprints and iris scans from Indian residents enrolling in Aadhaar. The Kiosk machines will have the ability to assign a 12

digit unique identification card if the Indian resident is currently not enrolled in the Aadhaar. The kiosk will also have the ability to authenticate Indian residents currently enrolled through fingerprints and or iris scanning recognition, this will cut down on duplicate entries and reduce risk of persons trying to commit fraud.

Requirements

Requirement #	Requirement Description	Type
1	System shall have access to the online India's UID system	Functional
2	System shall allow users to register for their 12 digit unique identification number	Functional
3	System shall allow users to verify their enrollment in the Aadhaar system	Functional
4	System shall feature fingerprinting apparatus and software	Functional
5	System shall feature Iris scanning apparatus and software	Functional
6	System shall feature touchscreen capabilities	Functional
7	Kiosk machine shall have and maintain full functioning capabilities	Performance
8	System shall allow multiple unique identification enrollees per day	Performance
9	Developers shall design a user-friendly interface for kiosk machine	Design
10	System shall incorporate a wireless encryption feature to protect Indian residents data	Security

Constraints

Potential constraints within the Kiosk System Design are incompatibility with software environments on the machines, kiosk system having issue authenticating Indian residents, kiosk machines experiencing physical malfunctions such as electrical issues, kiosk machines experiencing technical malfunctions such as not being able to access the Internet.

Assumption for resolving some constraints stated above are have the development team test current kiosk software environment for compatibility with internal software and code resources. To mitigate kiosks machine malfunction hire a reputable kiosk vendor with dependable and reliable machines. Third-party Kiosk Vendors machines should have fingerprints and Iris scanning capabilities along with wireless mechanism for Internet access.

Resources

Number	Name	Description	Type
1	Kiosk	Allows end users to register for their unique identification card	Hardware
2	Router	Allows Internet Connectivity	Hardware
3	Open Enrollment Kiosk agents	Will help users use the kiosk machine	Service
4	Kiosk software Front End development team	Team of developers who will develop the user-friendly interface for the kiosk machines	Service
5	Kiosk software Back End development team	Team of backend developers responsible for the kiosk communications with the online UID system for authentication purposes	Service
6	Kiosk training and rollout team	Team of training and planning professionals responsible for all kiosk machine delivery and training	Service

7	Project Management software Tool	Software Tool to help manage all task of the project and provide communication between team members and stakeholders	Software
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System Overview

The Kiosk system is presented as an alternative method for enrolling in the Aadhaar unique identification system. Kiosk stations if determined feasible will be located within registrar's an open enrollment centers across India's rural and urban areas. Users will be able to interact with the kiosk via is user-friendly interface by adding first and last name, address(if applicable), fingerprint, and iris scan. The Kiosk will then communicate(sending data as json) with the online UID system (via its API system) to determine if the Indian resident is already enrolled. If the Indian resident is already enrolled, the kiosk will notify the user's (through the data sent back from UID system) referring them to other possible actions that can be taken such as replacement of unique identification card. If the Indian resident is not enrolled the kiosk will notify the user with enrollment actions to be taken such as "click here" if you want to enroll in the Aadhaar. The Indian resident will be registered and a unique identification card with a 12 digit number will be dispensed to the user. The user can also request help from the open enrollment agent assigned to the various kiosk machines. According to Zollars" A good project system overview provides enough information that the reader has a good sense of the capacity of the system, what it can do, what it can interact with as well as any special requirements."(Zollars, 2019)

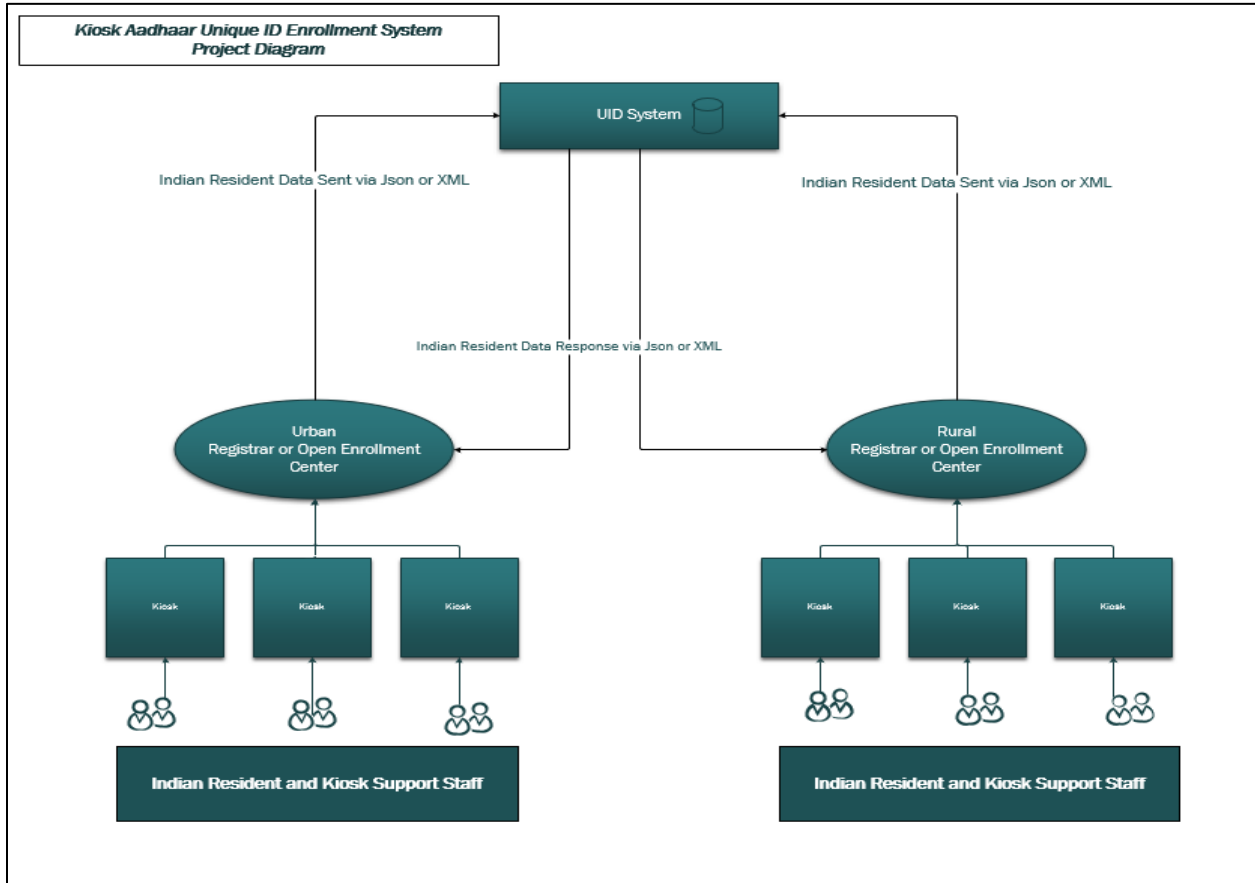
Document Detailed Design

#	Tasks	Details
1	Phase One	This phase will conduct a feasibility study needed for the use of kiosk machines in open enrollment and registers centers. This phase gathers vendor selection and discuss project requirements
1.1	Conduct preliminary analysis of the current system	Provides analysis on how the current Aadhaar system of enrolling Indian residents is being conducted.
1.2	Survey directors of registrar and open enrollment centers	Gather information from directors of registrar and open enrollment centers on the need of having kiosk machines at their facilities. If kiosk machines are needed number of machines will be gathered through the survey
1.3	Research reputable Kiosk vendors	Gather a list of third-party reputable vendors for selection for this project
1.4	Hold stakeholder and sponsor meeting to discuss preliminary analysis data, survey data, selection of kiosk vendor, and project requirements.	Meeting to inform stakeholders and sponsors regarding analysis of previous enrollment method, provide survey data on open enrollment directors need for kiosk machines, provide information on selection of kiosk vendors and to discuss project requirements.
1.5	Define project requirements	Project manager, stakeholders, and sponsors should have clear and concise project requirements
2	Phase Two	This phase the project will acquire a third-party kiosk vendor. This phase of the project will also purchase, order and plan storage for kiosk machines
2.1	Acquire approved vendor contract	Work with approved vendor for acquisition of negotiated contracts for kiosk machines.
2.2	Order approved number of kiosk machines	Work with kiosk vendors for order and delivery of approved numbered kiosk machines
2.3	Inventory and store kiosk machines	Develop tracking and find in-house storage of kiosk machines. These machines will be deployed to open enrollment centers and registrar throughout India.
3	Phase Three	Phase Three develop User-Friendly Software to Integrate onto Kiosk Machines
3.1	Front End Kiosk Software development includes: fingerprint recognition and Iris scanning implementation	Develop Front End, fingerprint and Iris scanning software for kiosk machines.
3.2	Back end Kiosk software development	Develop back End communications between the kiosk machine in the online new UID system
3.3	Global API integration to UID system	Backend development which integrates the global API of the UID system. The functionality developed here will

		create the back-and-forth communications between the kiosk machine and India's UID system
3.4	Onboard Front End a along with fingerprint recognition and iris scanning software on to Demo Kiosk machine	Integrate Front End, fingerprint, and Iris scanning technologies onto demo kiosk machine
4	Phase Four	Phase Four works on internal testing of the kiosk machine. Testing make sure the kiosk software is user-friendly and the functionality is in good working condition.
4.1	Conduct Internal Demo Kiosk test	The demo functionality of kiosk software. Software integrated with the machine. Tests enrollment verification is functional.
4.2	Communicate Demo test results	Communicate preliminary tests with appropriate stakeholders and sponsors. Meeting should result in the acceptance of kiosk software or revisions to functionality of the software.
4.3	Implement approved changes to Demo (if necessary)	Make necessary changes to the current implementation of the kiosk software via stakeholder and sponsors feedback.
4.4	Conduct final demo demonstration for stakeholders and sponsors	Demonstrate final kiosk demo with changes implemented for stakeholders and sponsor approval.
5	Phase Five	Phase Five involves the deployment of kiosk machines. In this phase teams will also be installing the approved kiosk software on all machines ready for deployment into the field. Development of a training rollout plan and kiosk machine field status report plan will also be developed in this phase.
5.1	Install approved Kiosk Software to all machines	Prepare all machines for approved kiosks software installation. All machines will be outfitted with the current approved internal kiosk software.
5.2	Kiosk Machine Rollout	Create and implement a kiosk machine rollout plan. This plan will focus on delivery of kiosk machines to open enrollment centers and registrar. The plan will include the installment of the machines and Internet access set up.
5.3	Kiosk Training Rollout	The kiosk training rollout plan will include kiosk software training for enrollment agents to support Indian residents in the use of the machine. The training plan will help staff become more familiar with the inner workings of the machines such as settings, the internal kiosk software, fingerprint and Iris scanning software etc.

5.4 Kiosk Machine Field status report

This report will keep track of all kiosk machines deployed in and around India. All kiosk machines will have an inventory tracking number. Staff members will go to specific areas and report on the condition of the machine whether it's in good working order or it has malfunctions.



References

Wikipedia. (2019). *Microsoft Project*.

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