**Chapter 1: STATEMENT OF WORK**

* 1. **Purpose Objective**

Feasibility study will provide fundamental investigations into the potential benefits associated with this project. The main purpose of the feasibility study is to cover all issues associated with the project, and determine if the investment of time and other resources will lead to a desirable result. One of the most important aspects of the study is to ensure that the total investment needed to successfully bring the project to completion is considered. Often, this will include addressing components such cash reserves, labor, construction, production facilities, outsourcing, and the cost of raw materials. Only when the feasibility study has addressed the total cost of completing the project can the study progress to the next level. As a second major component, the feasibility study will also address costs and other factors that are indirectly associated with the project. The utilization of a feasibility study has often assisted companies in understanding which projects to develop and which ones to abandon before investing resources in something that ultimately shows no promise of generating revenue. Taking the time to engage in a pilot or feasibility study does involve some usage of available resources, but these costs are much more readily absorbed than the larger amount that would be expended on a project that ultimately proved to be worthless.

* 1. **Scope**

The scope of our project “EKSHEBA HELP DESK” is to provide users to post about their problems and to get immediate solution for keeping the support system active 24 hours for the users (entrepreneur).

Users (entrepreneur) can do their registration and after registration they can post about their problems . They can also select the person to whom they want to write about the problem. From the admin dashboard admin can view the problems and can give proper solutions to the problem.

* 1. **Proposed System**

Our proposed system is intended for implementing a website which allows for online support system for entrepreneurs. By writing about their problems they can get immediate solution from the admin. In the system there will be a tracking system of number of problem submitted and solution done which will also work as monitoring system for the work of support system. It will make service easier for the entrepreneurs.

* 1. **Acronyms and Abbreviations**

ER Diagram-> Entity Relationship Diagram

SQL->Structured Query Language

SRS->Software Requirement Specification

**1.5 System Features**

**User (**entrepreneurs**)**

* Do registration
* Can Login
* Post their problems and select focal
* View problems and solutions
* Edit Details
* File upload
* Select Category

**Admin**

* Add Entrepreneurs
* View Problems
* Give Solution to problem
* View System details
* CRUD category
* Edit Profile

**Super Admin**

* Can Manage roles
* Can view working reports of the admins
* Can edit the entire system
  1. **Environment**
     1. **Organization Involved**

Project client: a2i

Developer: Esraq Humayun

User: Entrepreneurs, Consultants of Digital Access, Higher Authority of ICT

* + 1. **Processing**
* This Web Application will have a graphical user interface which will be able to view by any browser, thus this website is browser independent
* Two working modules. Administrator and Client
* This website will store the information of all registered user which can be viewed by user themselves and the administrator of this software
* Authenticated & secure login system and secure data transmission for all users.
  + 1. **Security**

Systems security requirements

* Registered Users(Entrepreneurs) ,Admin, Super Admin authentication is required to login to the website
* Admin can deny any registered users activity if felt necessary.
  1. **Assumptions**

Some third party software may be use to build up this project. These are free components; most of them are open source. We have used Opera, Mozilla Firefox, and Google Chrome etc. as a web browser to access user interface as client application. So our project will not be affected because we are not using anything for which it becomes illegal to use.

Frameworks and Software used for the project

* Laravel Framework
* Bootstrap Framework for front end
* HTML.CSS,JS,AJAX
* MY SQL Database
  1. **Constrains**
* Usage outside Regulation: Unregistered users cannot post complains.
* Bandwidth Limitation: It may lose server connection for technical error (Depends on Hardware/Internet connection). We need to run query again.
* Databases: Databases we are using MySql Database. User queries more than server’s limitations we need to check databases and refresh table data. In case of lack of DB caching.
* Parallel Operation: Parallel use of other Internet application with this software may hamper in bandwidth, may occur taking time for a query for slow connections
* Language Requirement: Language is used in this software is PHP. Suppose any user wants Oracle Database we need to use bind variable technique.

It may cause (In Case of Internet Security)

* Impersonation: can fake (spoof) source address in packet (or any field in packet)
* Hijacking: “take over” ongoing connection by removing sender or server, inserting himself in place
* Denial of service: prevent service from being used by others (e.g., by overloading resources)
* Server Overloaded: Server can be overloaded if user base increases dramatically in a very short period of time, this will render the website inaccessible.
  1. **Proposed System**
     1. **Description/Improvements of Proposed System**
* Implementation Forum Section
* Increase Server Load Capacity
* Implement live Q&A
* Implement FAQ
  + 1. **Staff Resource**
* One Full Stack Developer
* One software quality tester
  + 1. **Hardware**
* **Client Side**: Computer with an internet connection
* **Server Side**: Server grade computer with internet connection.

* + 1. **Software**
* **Client Side:** Any operating system capable of running an up to date browser
* **Server Side:** The database will run on MySQL and the backend of the site will run on Apache Server

**Assumed Implementation Constrains Can be:**

* System Failure
* Power Failure
* Implementation Constraint in SRS
* The project may not meet the agreed quality parameters
* The project might not deliver on the agreed time
  + 1. **Operating Environment**

The system will be operated from the external (your preferred data center) Linux Server in which site will be hosted. Hosting server has 99% Uptime. This website is platform independent. User application is accessible through various kinds of browsers like Opera, Mozilla Firefox, and Google Chrome etc. This website is a web application where client application has user interfaces through browser and main part is hosted on Apache Server. Operating System can be used Windows of any version from Windows 98, Windows XP/Vista to Windows 7, MAC OS X 10.5 or above

* 1. **Project Time and Cost**

* + 1. **Project Period**
* **Expected time of completion of project is 4 months**
  + 1. **Hosting Package**
* **Domain cost is TK 1000/Year**
* **For the most demanding sites**

**Web Spaces**: 20 GB

**Bandwidth**: 50 mbps

**Databases**: Unlimited\*

**Mailbox:** Unlimited\*

TK 5000/year

**Estimated Service Cost**

|  |  |
| --- | --- |
| **Description** | **Cost Assumption** |
| Site Launch(hosting) | 30,000 BDT |
| Maintenance | 50,000 BDT |
| Developers | 10,0,000 BDT |
| **Grand Total** | **180,000 BDT** |

* 1. **Risk Assessments**

|  |  |  |
| --- | --- | --- |
| **Risk** | **Probability** | **Impact** |
| Schedule Slip | 35% | Marginal |
| System goes sour | 10% | Critical |
| Project cancel | 15% | Negligible |
| False Features rich | 10% | Critical |
| Frustrated Team Members | 20% | Marginal |
| Server down incidence | 25% | Critical |

The impact of each risk driver on the risk component is divided into one of four impact categories—negligible, marginal, critical, or catastrophic.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Critical** | **Marginal** | **Negligible** |
| Schedule slip |  | Project delay, exceed budget |  |
| System goes sour | Grading miscalculation, Unauthorized access |  |  |
| Project canceled |  |  | Payment cancelation |
| False features rich | System doesn’t give proper output. Unable to fulfill requirement |  |  |
| Frustrated team members |  | Fail to meet deadline |  |
| Server down incidences | User overload, Hardware malfunction, electric grid malfunction |  |  |

* 1. **Assessing overall project risk**
* All the members are formally committed to support the project. They also ensure that they will give all types of available facilities.
* The software engineering team or the developers has the sound knowledge about the requirements so it is easily understandable by the team. The requirements details are well organized also informative, so it is under stable by the customers.
* The end-users are expecting that, they will be able to find all kind of information.
* The user has been fully involved in the definition of requirements. They are aware of the application requirements
* Project scope is stable because the minimum and mandatory scope is almost covered by the software engineering team. If any further scope will arise then just adding it with the old ones.
* The software engineering team has the right mix of skills. The team members have the capability of doing their work in a team, ability to work in pressure and also have sound knowledge according to the software implementation.
* Currently all possible requirements are being listed, and seem that if anything would be added later to the list will not make the project unstable. All requirements for this project are easily available that will enthusiast the end-user to use it.
* Project team prepare the possible risk assessment and aware of handling the risk. Client is also being notified