Software Requirements Specification

For

Generating Data Summary Document for Accreditation Bodies

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| Software 1 | Requirements | Specification |
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1. Introduction

1.1 Purpose

The purpose of this document is to build an automated system which will generate final pdf on providing required data on a single click which will be useful for Accreditation body.

1.2 Intended Audience and Reading Suggestions

This document is intended for project guide and experts. This project is useful for educational institutions mainly engineering colleges. Section 1.4 briefs about the scope of project, section 2 walks you through overall description of product like functions, operational environment, design and implementation constraints, etc.

Interface requirements is described in section 3. System features are listed in section 4 and section 5 lists non functional requirements.

1.3 Product Scope

Our goal is to generate automatic method to generate a summary document of last three academic years which will assist the educational institutes for different accreditation bodies. The system will take away the clerical work and will reduce the cost as well as efforts of respective people.

1.4 References

https://ieeexplore.ieee.org/document/6064

945/

• https://ieeexplore.ieee.org/document/4359

494/

1.5 User Documentation

<u>User Manual</u>: A user manual will be provided to the user to refer to the working of the system if required. A basic training will be given to the user on how to use the system. The manual will contain all the things described in the basic training and also about the exceptional cases where the system might not work properly. The do's and don'ts would also be written in it. The manual will also contain

information about how to prepare data before feeding it to the system.

<u>Video Tutorials</u>: The user will also be provided video tutorials for learning how to use the system features properly and efficiently. Each feature will be covered in detail in the tutorials. Video tutorials will help new users to get used to the system.

2. Requirement Analysis

- The product is designed to reduce the efforts of the teaching as well as non-teaching faculties of the educational institutions during the time period of accreditations. It would serve as a tool for educational institutes to speed up the data analysis process without any compromise on the precision.
- This would be a completely new, self-contained product. This documents explains the complete system and its required components.

3. Functional Requirements

- When the staff enters the data through normal ERP the data will be organised in a
 particular manner through which it can be modelled in any different way as and when
 needed.
- If any of the staff member enters a wrong or incomplete detail the system will give an error message which will in turn be corrected by the staff.
- If any member forgets to feed data in time the system will notify them to do so. This will reduce the workload on the staff of entering the data afterwards.

4. External Interface Requirements

4.1 User Interfaces

The software will operate on any computer as well as android system with following minimum requirements: Hardware requirements:

- Intel i3 processor or its equivalent
- 8 GB physical memory
- 8 GB graphics memory

Software requirements:

• Windows 10/ Linux

• Android above 4.0(JellyBean)

4.2 Hardware Interfaces

No External Hardware Required.

4.3 Communications Protocols

TBD

4.4 Software Interfaces

1. Technology: Node.js

2. Libraries used: express

3. Operating System : Android / Windows

4. Web Browser: Desktop Versions of chrome or firefox

4.5 Database Backend

The Database intended to be used is MongoDB.

5. Technical Specification

5.1 Performance constraints

- If the staff members enter wrong or incomplete data it may cause further analysis problems.
- If they don't enter data on time then it may increase the workload of entering data afterwards. System may notify the staff in such places.

5.2 Memory/OS/Hardware

Hardware requirements:

- Intel i3 processor or its equivalent
- 8 GB physical memory
- 8 GB graphics memory

Software requirements:

- Windows 10/ Linux
- Android above 4.0(JellyBean)

Appendix A: Glossary