PROJECT REPORT

ON

**E-LABOUR DELHI**

(A web- based application which facilitates the labourers to file their annual returns online)

Under

**Government of Delhi**

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Chapter 1 Introduction

## An Overview

## TOPIC OF THE SYSTEM

## PURPOSE OF THE SITUATION

## TARGET READER

## RATIONALE BEHIND THE SYSTEM

## PROJECT SCOPE

## FEASIBILITY ANALYSIS

## ETHICAL ISSUES

1.1 TOPIC OF THE SYSTEM

The primary goal of this project is to develop a web-based application which allows the labourers of Delhi to file their annual returns online according to various acts.

1.2 PURPOSE OF THE SITUATION

The motive behind developing this web based application is to provide the labourers of Delhi with the provision to file their annual returns online which they are doing manually till date . Filing the annual returns manually consumes lot of efforts and time as well. Developing this application would save their efforts and time and would help them to fill their annual returns with much ease.

1.3 TARGET READER

This system is being developed primarily for-

* Labourers of Delhi

1.4 RATIONALE

This Web enables application provides benefits in many ways, like it allows users (labourers of Delhi to file their annual returns online which had been done manually till date.

The system to be implemented could bring about significant tangible and intangible benefits. Given below is a list of tangible and intangible benefits expected from the system:

## TANGIBLE BENEFITS

**COST AND TIME BENEFITS:**

* As for now the unified annual return has to be filed manually in the government offices which marks in cost and time loss.
* The web enabled application would help the user(labour) to do this task online, thus results in cost benefits and time savings.

**AVAILABILITY:**

* The whole process of filing the annual return by the labourers of Delhi was done manually till date.
* The web based application provides much ease to file the unified annual return online.

**NO DATA LOSS:**

* No data loss as the Data is always stored on server and not on individual’s system.

## 1.4.2 INTANGIBLE BENEFITS:

**INCREASED USER SATISFACTION:**

* Currently there is no system available which allows the labourers of Delhi to file their annual return online.
* With this web enabled application they can easily file it.

1.5 PROJECT SCOPE

The proposed system is a web-based system which will be using desktop/laptop for client application and server for application data.

The modules for the proposed system have been listed below:

* **Login Module:** This module provides a platform for the user to enter the email id /phone number. It matches the entered email/phone number with the data stored in the server’s database. If the fields match, an OTP will be send to the corresponding email/phone number. As soon as the user provides the OTP within a session of five minutes, he will be logged in to the website and will be navigated to the dashboard.
* **Register Module:** The user (labour) registers himself / herself to the website by providing his name, email, phone number, Aadhar Card number. If the details are valid, an OTP is sent to his e-mail and phone number. The data gets saved in the database and the user is registered to the e-Labour website.
* **Dashboard Module:** After logging into the e-labour website, the user (labour) selects an act for which he/she can file the annual return, if he/she has not filed it for the current year.

1.6 FEASIBILITY ANALYSIS

Feasibility studies address things like where and how the business will operate. They provide in-depth details about the business to determine if and how it can succeed, and serve as a valuable tool for developing a winning business plan.

## 1.6.1 Schedule Feasibility Report

It consist of assess the work to which the time frame and the completion date for all major activities within the project that meets organizational deadlines and constraints for affecting change. The project should be planned and work should be allocated in this way such that every objective can be complete within the time period.

## 1.6.2 Technical Feasibility:

Technical Feasibility mainly involves the hardware and the software requirements of the system regarding all the tasks of the system to be done.

## 1.6.2.1 HARDWARE RESOURCES

The following is the list of the hardware resources required for developing and running the system.

1. for Developing-

* + - CPU: 1.0 GHz Pentium IV or above,
    - Memory: RAM 512 MB
    - Disk Space: 1 GB space(at least)
    - Monitor: Any Standard Monitor
    - Peripherals: Mouse, Keyboard
    - Wi-Fi or NIC card

2. for Running the system-

* Desktop or laptops

## 1.6.2.2 SOFTWARE RESOURCES

The following is a tentative list of software resources that the developer seeks to utilize:

* + - Operating System : Windows
    - Server: Apache Tomcat 7.0.2
    - Software Development Tools: InteliJ IDEA
    - Version Control Tool: GitHub
    - Database Tools: MySQL
    - Presentation Tools: MS Word 2007

## 1.6.3 Operational Feasibility:

It may be defined as the process of assessing the degree to which a proposed system solves business problems or takes advantage of business opportunities.

Problems address and advantages of this system are provided in the documentation.

## 1.6.4 Economic Feasibility

The purpose for assessing economic feasibility is mainly to identify the financial benefits and costs associated with the development project. Economic feasibility is referred as cost and benefit analysis for any system.

Once the technical feasibility is established, it is important to consider the monetary factors also. Since it might happen that developing a particular system may be technically possible but it may require huge investments and benefits may be less.

Cost Benefits are included under Rationale by the developer.

1.7 Ethical Issues

It ensures that the project won’t do any harm to the society or anyone in anyways. It contains issues like no animal harm, no copying of data without prior permission etc and to ensure that the developer has filled up an ethical form and it will be provided in upcoming documentation.

Chapter 2 Problem Description

## An Overview

## PROBLEM

* IDEA DESCRIPTION

## PROBLEM IMPORTANCE AND JUSTIFICATION

2.1 Problem

Unified annual returns for employers under various ACTS.A web enabled applications of the employers to be synchronized with web site of Labour Department by giving unique identification number to each. .

2.2 Idea Description

A web enabled application which will allow the user to register/login, providing a unique identification number which redirects to Labour Department website and states the status of unified annual returns for the employees . This application will be developed using java , a web enabled application which has login portal for the existing users of e-Labour website and this login is integrated with Labour website and a web view in this application will have the status of unified annual returns of labour. The application has feedback and can state issues regarding returns of employees.

2.3 Problem Importance and Justification

### The web based application enables the employee to file the unified annual returns online which was done manually till date.

Chapter 3 Coding

## An Overview

## FLOWCHART

## FUNCTIONALITIES OF MODULE

## 3.1 Flowchart

## A close up of a map Description generated with high confidence

3.2 USE CASE DIAGRAM

![A picture containing text, map

Description generated with very high confidence]()

## 3.3 Functionalities of Module

## 3.3.1 Front End

* index.jsp
* This is the home page of the website.
* Login/Register
* It provides with the following functionalities:
  + About Us
  + FAQs
  + Help
  + Careers
  + Contact Us
  + Labour Acts
* error.jsp
* It redirects to 404 error page if the URL does not match .
* It consists of fields such as:
* Date
  + Error
  + Status
  + Message
  + Exception
  + Trace
* career.jsp
* This provides various links of websites which the user can refer and explore regarding educating their children thus stopping child labour.
* help.jsp
* This provides the user the facility to refer to the guidelines which helps him/her to know about how to use the website.
* faqs.jsp
* This resolves the general queries regarding to labour acts.
* acts.jsp
* This consists of list of acts under which the user has to file the annual return.
* admin.jsp
* annualReturn.jsp
* establishment.jsp
* profileSettings.jsp
* This allows the user to change his/her profile details.

## 3.3.2 Back End

* URLController.java
* It is a controller class that navigates the user to a particular URL i.e. a particular page corresponding to the tab clicked.
* RegisterController.java
* It is a controller class that takes care of the registration process.
* It takes the request parameters from the user.
* RegisterController has an instance of RegisterPOJO class which initializes the request parameters.
* RegisterPOJO.java
* This class has mutator and accessor methods to initialize the request parameters.
* ContactUsController.java
* This controller class takes the request parameters such as name, email, subject and message and passes it to a method, contactform( ).
* The request parameters are initialized by the ContactUs class through an instance.
* After the success of this task, an email is sent to the user.
* ContactUs.java
* It initializes the request parameters passed from ContactUsController.java
* LoginController.java
* User can login to the E-Labour Delhi by receiving an OTP either on mobile phone or on email id.
* It checks the mobile number/email id for its existence in database and then an OTP is send to the corresponding user’s device which the user enters.
* User is authenticated if the OTP that is received and sent matches.
* OTP.java
* This class generates the OTP in a key-value pair where key is the OTP mapped to value i.e username and rewrites the OTP if it already exists.
* For the generation of OTP ,GenerateOTP (String key) method is used.
* OTP is fetched and cleared by getOTP and clearOTP(String key) methods respectively.
* EmailServices.java
* In this class all the configuration required for sending an e-mail is done.
* Example:
* Setting of SMTP host
* Setting of SMTP post
* Setting of e-mail id and password of sender

Chapter 4 User Manual

## An Overview

## User guide

**4.1 User Manual**

Welcome to E-Labour Delhi (Web - based Application)!!!

This manual provides very simple and quick steps for running this application by walking you through the Sample Tasks.

**4.1.1 Sample Task-1:** Navigate through the web app (Homepage).

|  |
| --- |
| (**Homepage)**    Click Login/Register button. Button |

**4.1.1.1 Sample Task-1.1:** Navigate through the web app (About Us).

|  |
| --- |
| (**About Us)** |

**4.1.1.2 Sample Task-1.2:** Navigate through the web app (FAQ-1).

|  |
| --- |
| (FAQ’s**)** |

**4.1.1.2.1 Sample Task-1.2:** Navigate through the web app (FAQ-2).

|  |
| --- |
| (**FAQ’s)**    Click here to get answers to your queries. |

**4.1.1.3 Sample Task-1.3:** Navigate through the web app (Help-1)

|  |
| --- |
| (**Help)**    Click here to start filling the annual returns form.  Click here to get to know about the various labour acts. |

**4.1.1.3.1 Sample Task-1.3:** Navigate through the web app (Help-2)

|  |
| --- |
| (**Help)** |

**4.1.1.3.4 Sample Task-1.3:** Navigate through the web app (Help-3)

|  |
| --- |
| (**Help)** |

**4.1.1.3.5 Sample Task-1.3:** Navigate through the web app (Help-4)

|  |
| --- |
| (**Help)** |

**4.1.1.4 Sample Task-1.4:** Navigate through the web app (Careers-1)

|  |
| --- |
| (**Careers)** |

**4.1.1.4.1 Sample Task-1.4:** Navigate through the web app (Careers-2)

|  |
| --- |
| (**Careers)** |

**4.1.1.4.2 Sample Task-1.4:** Navigate through the web app (Careers-3)

|  |
| --- |
| (**Careers)** |

**4.1.1.4.4 Sample Task-1.4:** Navigate through the web app (Careers-4)

|  |
| --- |
| (**Careers)** |

**4.1.1.4.5 Sample Task-1.4:** Navigate through the web app (Careers-5)

|  |
| --- |
| (**Careers)** |

**4.1.1.4.6 Sample Task-1.4:** Navigate through the web app (Careers-6)

|  |
| --- |
| (**Careers)** |

**4.1.1.5 Sample Task-1.5:** Navigate through the web app (Contact Us)

|  |
| --- |
| (**Contact Us)**    Click here to submit your query.  Fill all the given fields. |

**4.2 Sample Task-2:** Log on to the website in case you are an already existing user.

|  |
| --- |
| (**Log In)**    Click Log in button to logon to the website.  Fill the Registration Details in fields |

**4.3 Sample Task-3:** Register yourself to the website in case you are not an already existing user.

|  |
| --- |
| (**Registration)**    Fill the Registration Details in fields  Click Sign up Button |
| **4.3 Sample Task-3:** Register yourself to the website in case you are not an already existing user.   |  | | --- | | (**Dashboard)** | |

**4.3 Sample Task-3:** Register yourself to the website in case you are not an already existing user.

|  |
| --- |
| (**Acts)** |

**4.3 Sample Task-3:** Register yourself to the website in case you are not an already existing user.

|  |
| --- |
| ( **Unified Annual Return Form Filling)** |

**4.3 Sample Task-3:** Register yourself to the website in case you are not an already existing user.

|  |
| --- |
| (**Unified Annual Returns form Filling for Factory Acts,1948)** |

**4.3 Sample Task-3:** Register yourself to the website in case you are not an already existing user.

|  |
| --- |
| (**Unified Annual Returns form Filling for Factory Acts,1948 (contd..))** |

**4.3 Sample Task-3:** Register yourself to the website in case you are not an already existing user.

|  |
| --- |
| (**Registration)**    Fill the Registration Details in fields  Click Sign up Button |

**4.3 Sample Task-3:** Register yourself to the website in case you are not an already existing user.

|  |
| --- |
| (**Registration)**    Fill the Registration Details in fields  Click Sign up Button |

**4.3 Sample Task-3:** Register yourself to the website in case you are not an already existing user.

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|  |
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|  |
| --- |
| (**Registration)**    Fill the Registration Details in fields  Click Sign up Button |

**4.3 Sample Task-3:** Register yourself to the website in case you are not an already existing user.

|  |
| --- |
| (**Registration)**    Fill the Registration Details in fields  Click Sign up Button |

Chapter 5 Flow of filing annual return

## 5.1 Register

* The user(labour) first registers himself in the website by providing his personal details :
* Username
* Full Name
* Email ID
* Phone No
* Aadhar Number
* An OTP is generated which is sent to the user’s email and phone number.
* As soon as the user is authenticated, his/her details are saved in the database and the user is redirected to the dashboard page.

## 5.2 Login

* The user has to enter the email/phone.
* Corresponding to this an OTP will be send either to his/her mail or phone number as mentioned.
* The OTP will be valid for a time span of five minutes.
* If the entered OTP matches with the received OTP, the user gets logged into the e-Labour Delhi website.

## 5.3 Dashboard

* The user can select any act of his concern corresponding to which he/she has to fill a form in order to file his/her annual returns.
* When the user selects an act , firstly the **centralized database** is checked that whether the user has already filed his/her annual return for the current year with the same UID.
* This is checked by mapping the status from the database which is centralized.
* If the annual returns is already filed, the user is notified that he/she cannot file it for the current year and is redirected to the dashboard.
* If the annual returns is not filed then the user has to fill the annual return form.
* Finally the details are submitted and the user logs out from his/her account.
* If the labour tries to select an act with same Aadhar card number but different profession, then automatically a request is generated which notifies the administer about it.
* If the administer approves the request then the user’s details are deleted from the database , so that he/she can file his/her annual return with different profession under different act, otherwise a denial message is notified to the user.

Chapter 6 Future Scope

* The web based application can be scaled further according to the requirements.
* More fields for user details in the annual returns form can be added according to needs.
* More Acts can be added.
* PROVIDING GOVERNMENT OF DELHI INTEGRITY OF USER
* ONE STEP AHEAD FOR DIGITIALISING INDIA

Chapter 7 Conclusion

Nowadays, the system of Delhi in filling ANNUAL RETURN is poor that is ANY labour/user/employee can fill the annual return from DELHI as well as GAZIABAD OR OTHER STATE changing his profession and GOVERNMENT is unable to check this his profession or STATE as well as has to file the ANNUAL RETURN for that user. GOVERNMENT NEED SOMETHING WHICH COULD CHECK USERS INTEGRITY OF BEING TO ONE STATE AND ONE PROFESSION while filling ANNUAL RETURN.

This web-enabled application would solve the problem of manually filing their annual returns form by providing them with the facility to file it online with much ease and in less amount of time which they are presently investing in filing it manually. Further, they would be able to track their application status online with their unique identification number (UIN). This would also provide ease to the government in processing the annual returns file and maintaining it’s record parallely making sure that user(labour) don’t apply annual return from anyother STATE.

This application implemented, would be very beneficial for the labour class people as well as for the Delhi government as the processing of the forms would be done online thereby making the entire process fast enough.

This provides the GOVERNMENT an AUTHENTICATED user only who is applicable to fill annual return once only for ONE profession. If user changes his profession and state and fills details it wont be valid as we are providing integrity for a particular user i.e once in a year he can file the annual return and if he changes his profession then he need to file for it and admin of the website will have the time stamp id to check whether the user has completed his one year of ANNUAL FILLING or NOT.

PROVIDING EASE TO GOVERNMENT OF DELHI AND ONE STEP FOR DIGITALIZING INDIA.