VISVESVARAYA TECHNOLOGICAL UNIVERSITY
JNANA SANGAMA, BELAGAVI – 590018

A Seminar Report on

WEB APPLICATION

Submitted in partial fulfilment of the requirements for the award of degree of

BACHELOR OF ENGINEERING
IN
INFORMATION SCIENCE AND ENGINEERING

Submitted by:

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DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING
JYOTHY INSTITUTE OF TECHNOLOGY, BENGALURU. 560082
2018-2019

JYOTHY INSTITUTE OF TECHNOLOGY, BENGALURU-560082

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

Certificate

Certified that the seminar work entitled "**WEB APPLICATION**" carried out by **Mr. Swaroop Nadiger, 1JT15IS044,** a bonafide student in partial fulfilment of the requirements for the award of the degree of **Bachelor of Information Science and Engineering of Visvesvaraya Technological University, Belagavi**, during the year 2018-19. It is certified that all the corrections/suggestions indicated for internal assessment have been incorporated in the report. The Internship report has been approved as it satisfies the academic requirements in respect of internship work prescribed for the Bachelor of Engineering degree.

Signature of the Guide	Signature of the HOD	Signature of the Principal
Mr. Vadiraja A. **Assistant Professor,** **Dept. of ISE, JIT.**	**Dr. Harshvardhan Tiwari.** **Associate Professor and Head,** **Dept. of ISE, JIT.**	**Dr. Gopalakrishna K.** **Principal,** **JIT, Bengaluru.**

Name of the Examiners:	Signature with date:
1.	.....
2.	.....

DECLARATION

I, **Swaroop Nadiger** bearing the **USN: 1JT15IS044**, studying in the final semester of Bachelor of Engineering in Information Science and Engineering at JYOTHY INSTITUTE OF TECHNOLOGY, Bengaluru, hereby declare that this internship work entitled **"WEB APPLICATION"** which is being submitted by me in the partial fulfillment for the award of the degree of Bachelor of Engineering in Information Science and Engineering, from Visvesvaraya Technological University, Belagavi, is an authentic record of me carried out during the academic year 2018-2019, under the guidance of **Mr. Sayeed Sageer Ahmed**, Technical Director Rackminds Technologies Solutions Pvt Ltd.

I further undertake that the matter embodied in the dissertation has not been submitted previously for the award of any degree or diploma by me to any other university or institution.

Place: Bengaluru **Swaroop Nadiger**

Date:

ACKNOWLEDGEMENT

It is my proud privilege and duty to acknowledge the kind of help and guidance received from several people in preparation of this report. It would not have been possible to prepare this report in this form without their valuable help, cooperation and guidance.

First and foremost, I wish to record my sincere gratitude to **Management of this college** and to my beloved **Principal, Dr. Gopalakrishna K,** Principal, Jyothy Institute of Technology, Bengaluru for his constant support and encouragement in preparation of this report and for making available library and laboratory facilities needed to prepare this report.

My sincere thanks to **Associate Prof. Harshvardhan Tiwari,** Head - Department of Information Science and Engineering, JIT, for his valuable suggestions and guidance throughout the period of this report.

I express my sincere gratitude to my guide, **Mr. Sayeed Sageer Ahmed** Technical Director Rackminds Technologies Solutions Pvt Ltd, for guiding us in in the process lifecycle. My numerous discussions with him is extremely helpful. I hold his esteem for guidance and inspiration received from him.

The internship on **"WEB APPLICATION"** was very helpful to us in giving the necessary background information and inspiration in choosing this topic for the Internship.

Last but not the least, I wish to thank my **parents** for financing my studies in this college for constantly encouraging us to learn Engineering. Their personal sacrifice in providing this opportunity to learn engineering is gratefully acknowledged.

Swaroop Nadiger

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INTRODUCTION

The **Software Development Life Cycle (SDLC)**, also referred to as the application development life-cycle, is a term used in systems engineering, information systems and software engineering to describe a process for planning, creating, testing, and deploying an information system.

There are usually six stages in this cycle:

- Analysis
- Design
- Development & Testing
- Implementation
- Documentation
- Evaluation.

Web application development is the process and practice of developing web applications, which can help a business to simplify a lot of things thereby making it user-friendly.

Some of the technologies used include:

- Ajax
- ASP
- ASP.NET
- CSS
- CGI
- HTML
- Java
- JavaScript
- Perl
- PHP
- Python

Chapter 2

COMPANY PROFILE

Figure 2: Logo of Rackminds Technologies

Rackminds Technologies Solution Pvt Ltd. is a software company founded in 2006, which specializes in software outsourcing and solution Provider Company. The company offers outsourced product development, custom development, IT outsourcing services and with highly focus on qualitative, timely delivery and cost-effective.

With a pool of highly skilled software engineers, RACKMINDS offers its clients the value-added solutions, technical skills, accountability and industry knowledge that help to reduce their operating costs, deliver custom applications on time and on budget. RACKMINDS works day in and day out on developing solutions.

An aggressive customer-proactive, employee-oriented technology-company whose quintessential drive is growth, RACKMINDS seeks opportunity, pursues dreams and targets global expansion. RACKMINDS addresses the global marketplace based on a solid foundation of technology.

Committed to providing employees a platform where excellence is a mantra. RACKMINDS strives to create an environment that builds careers while enriching life.

A firm believer in community values, RACKMINDS is engaged in a range of strategic programs that generate benefits for the community.

RACKMINDS is one of the fastest growing IT Services and Solution Company specializing in implementation of SAP Solutions, Oracle, and web application to clients.

Vision of Rackminds is “To achieve global IT services leadership in providing enhanced value-added high quality IT solutions to our clients in selected horizontal and vertical segments, by combining technology skills, domain expertise, process focus and a commitment to long-term client relationships.”

Their headquarters is placed in Mysore, Karnataka and available to everyone through their website http://www.rackminds.com

Chapter 3

TASKS PERFORMED

Summary of the benefits claimed by the workers amongst different benefits available in the Karnataka State Building and Other Construction Workers' Welfare Board and the details of the benefitted person are available. Also, report of the benefitted workers from each category of benefits of each month can be generated automatically.

Being part of this project, contribution to various tasks were given prominence during the internship.

3.1 Requirement Analysis and Documentation

As the project aimed at development of a web application, analysis of the requirements is the first stage. Information about the KBOCWWB firm was gathered from the respective websites. This helped in preparing the Software Requirements Specification Document. A software requirements specification (**SRS**) is a document that describes what the software will do and how it will be expected to perform. The SRS provides a detailed overview of the web application including its user interface design. The requirements are collected using a number of practices as given -

- Studying the existing or obsolete system and software,
- Conducting interviews of users and developers,
- Referring to the database or
- Collecting answers from the questionnaires.

3.2 Feasibility Study

After requirement gathering, a rough plan of the software was designed. The plan was then analysed if it is financially, practically and technologically feasible for the organization to take up. Also system analysis was performed. System analysis includes Understanding of software product limitations, learning system related problems or changes to be done in existing systems beforehand, identifying and addressing the impact of project on organization.

3.3 Software Design

Based on the requirements gathered, the front end and the back end of the application were designed. The inputs from users and information gathered in requirement gathering phase were the inputs of this step. The output of this step has come in the form of two designs namely, logical design and physical design.

3.4 Database design and creation

Database design is a crucial step. Database was designed by applying the normalization techniques. The database was created using MySQL.

3.5 Front End and GUI Development

Effective design for user interactions plays important role success of the product as final users are beneficiary parties whose requirements are given the utter most importance in any project. Design and development front end for the application was carried out during the internship.

Chapter 4

Tools and Frameworks used

Many tools and frameworks were used to store data, create the web application form and to make it presentable wherever necessary in the project.

4.1 HTML5

HTML stands for Hyper Text Mark-up Language. HTML is a very simple computer language and is quite easy to learn. It is used to design web pages using mark-up language. HTML is not a programming language it is the combination of Hypertext and Mark-up language. Hypertext defines the link between the web pages. Mark-up language is used to define the text document within tag which defines the structure of web pages.

Figure 4.1: HTML

4.2 PHP

PHP is a widely-used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML. Instead of lots of commands to output HTML (as seen in C or Perl), PHP files can contain HTML, CSS and JavaScript code. The PHP code is enclosed in special start and end processing instructions <? php and ?> that allow you to jump into and out of "PHP mode."

What distinguishes PHP from something like client-side JavaScript is that the code is executed on the server, generating HTML which is then sent to the client. The client would receive the results of running that script, but would not know what the underlying code was. You can even configure your web server to process all your HTML files with PHP, and then there's really no way that users can tell what you have up your sleeve.

Figure 4.2: PHP

4.3 JAVASCRIPT

JavaScript is a dynamic computer programming language. It is lightweight and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages. It is an interpreted programming language with object-oriented capabilities. It enables less server interaction, immediate feedback to the visitors, increased interactivity and richer interfaces.

Figure 4.3: JavaScript

4.4 CSS

Cascading **S**tyle **S**heets, fondly referred to as **CSS**, is a simply designed language intended to simplify the process of making web pages presentable. CSS allows you to apply styles to web pages. More importantly, CSS enables you to do this independent of the HTML that makes up each webpage. CSS is easy to learn and understood but it provides powerful control over the presentation of an HTML document.

For example, to alter the font, colour, size and spacing of your content, split it into multiple columns, or add animations and other decorative features. This module gets you started on the path to CSS mastery with the basics of how it works, writing CSS rules, applying CSS to HTML, how to specify length, colour, and other units in CSS, cascade and inheritance, and debugging CSS.

Figure 4.4: CSS

4.5 SQL

SQL abbreviation for Structured Query Language, is a language to request data from a database, to add, update, or remove data within a database, or to manipulate the metadata of the database.

SQL is a declarative language in which the expected result or operation is given without the specific details about how to accomplish the task. The steps required to execute SQL statements are handled transparently by the SQL database. Sometimes SQL is characterized as non-procedural because procedural languages generally require the details of the operations to be specified, such as opening and closing tables, loading and searching indexes, or flushing buffers and writing data to the file systems. Therefore, SQL is considered to be designed at a higher conceptual level of operation than procedural languages because the lower level logical and physical operations aren't specified and are determined by the SQL engine or server process that executes it.

Figure 4.5: SQL

Chapter 6

REFLECTION

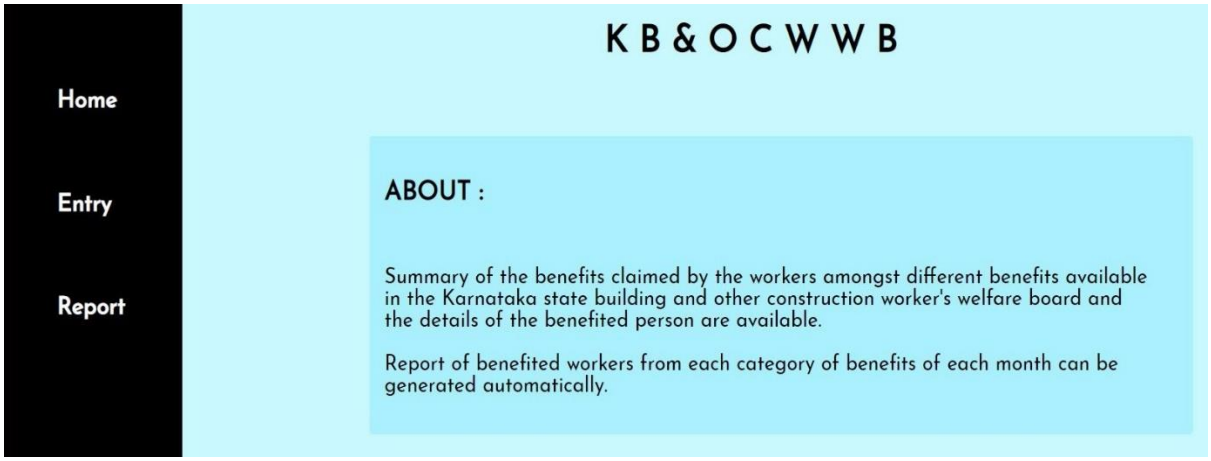

Figure 6.1: About Page of the Website

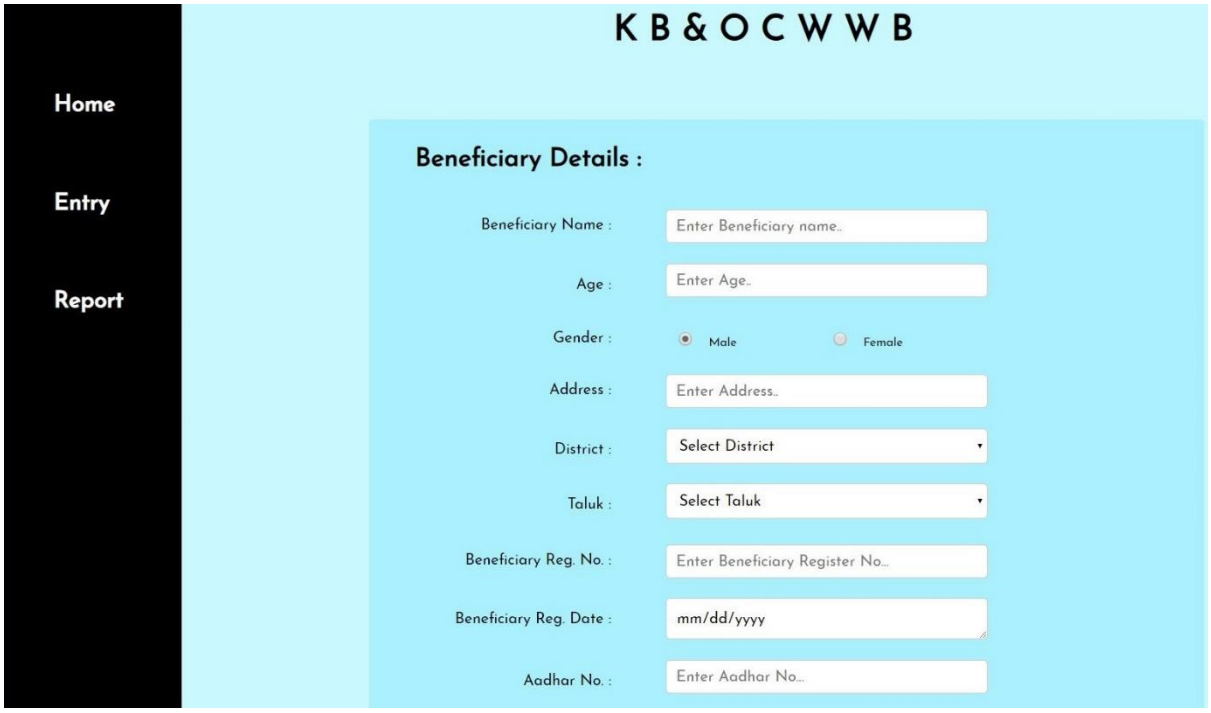

Figure 6.2.1: Beneficiary Details of E-Karmic User

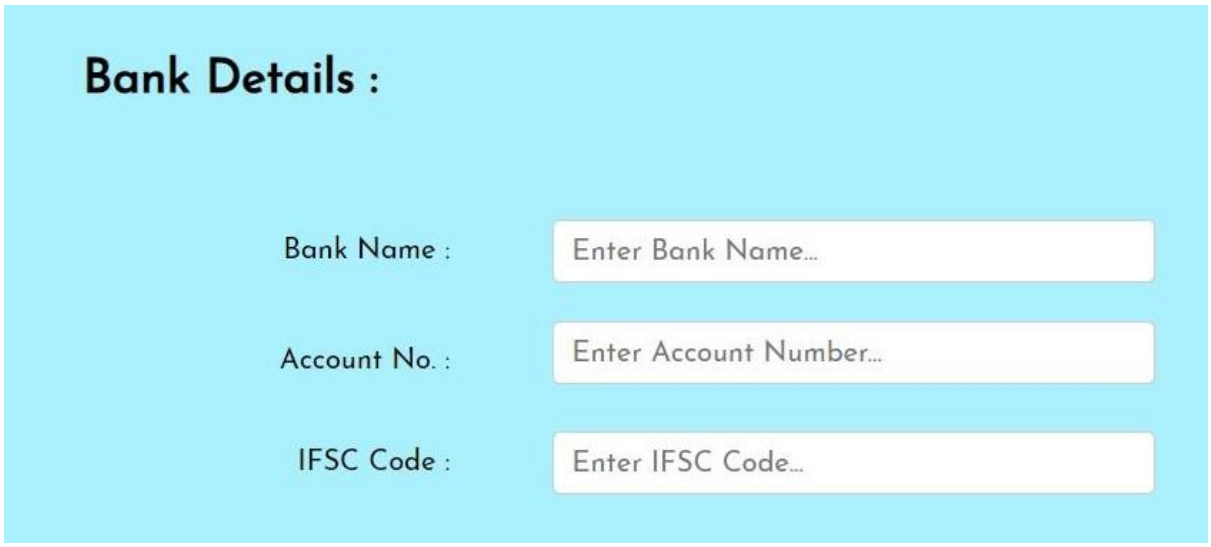

Figure 6.2.2: Bank Details of the E-Karmic User

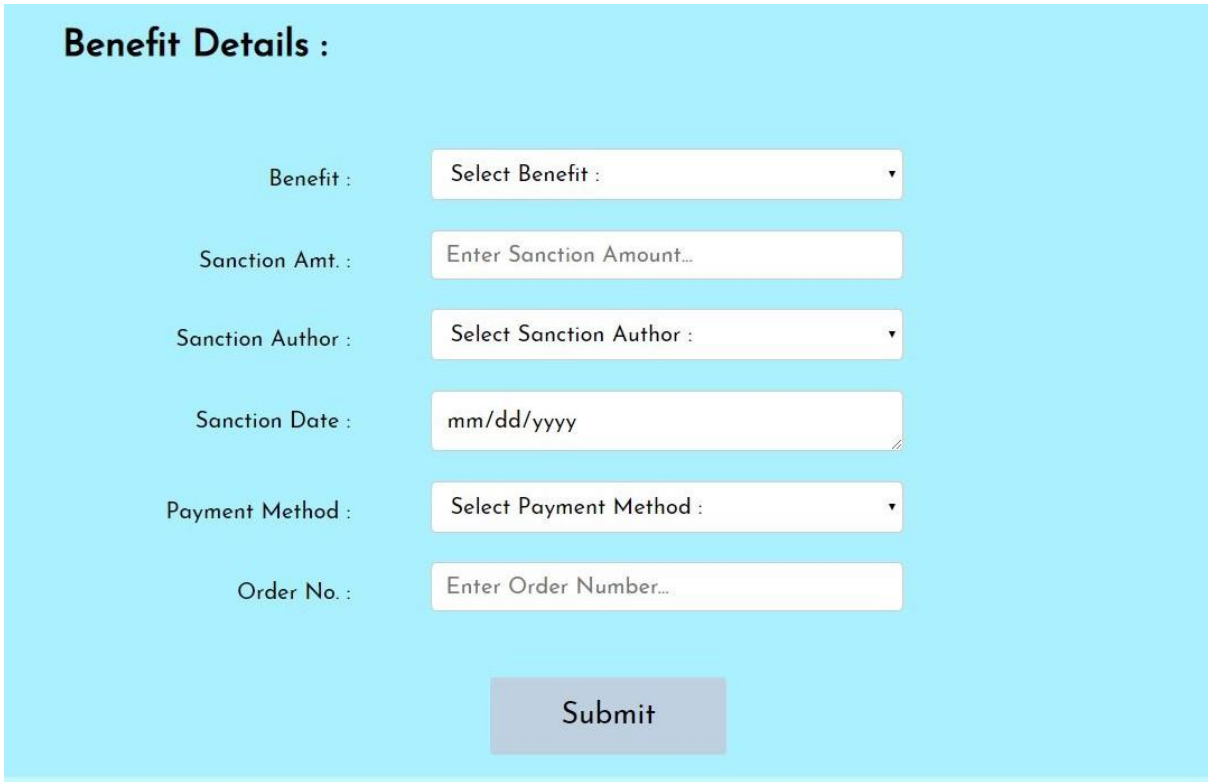

Figure 6.2.3: Benefits Details of the E-Karmic User

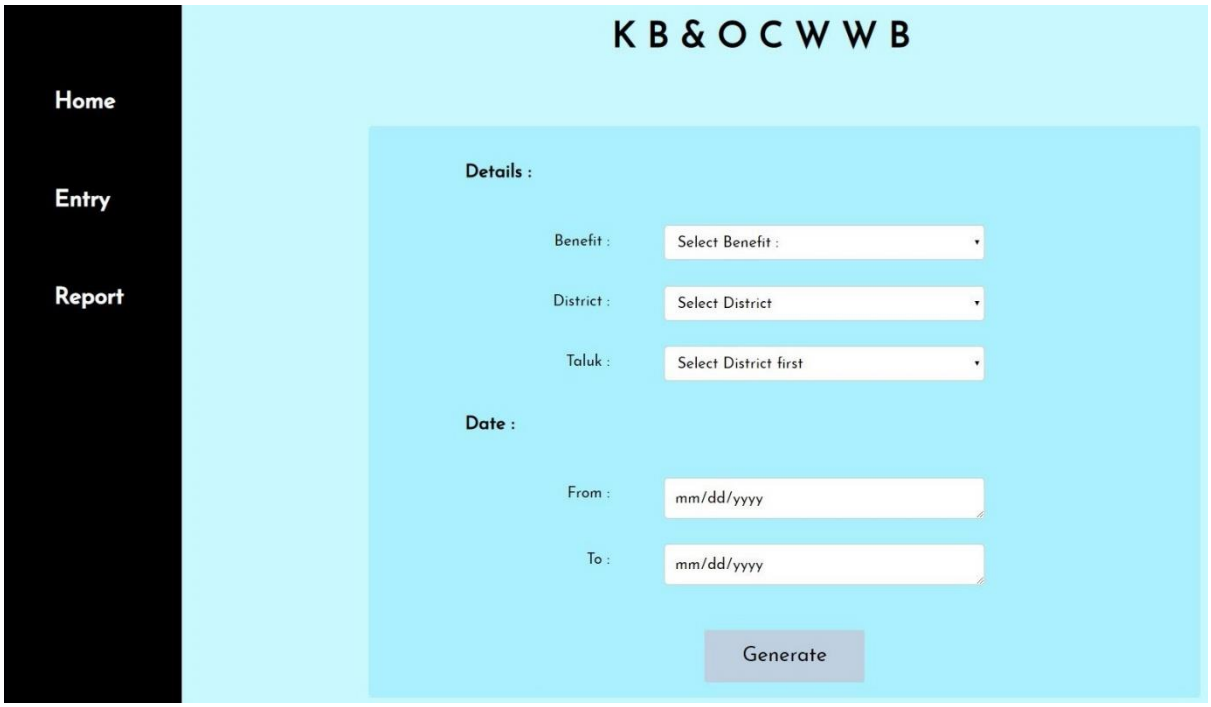

Figure 6.3.1: Report Generation based on Benefit, District and Taluk

Beneficiary Claims Backlog Report

Register No	Beneficiary Name	Taluk	Sanctioned Amount	Sanctioned Date
[illegible]	[illegible]	Bengaluru	3000.00	2010-04-29
[illegible]	[illegible]	Bengaluru	3000.00	2010-04-29
[illegible]	[illegible]	Bengaluru	10000.00	2010-04-29
[illegible]	[illegible]	Bengaluru	3000.00	2010-05-28
[illegible]	[illegible]	Bengaluru	3000.00	2010-06-01
[illegible]	[illegible]	Bengaluru	3000.00	2010-06-05
[illegible]	[illegible]	Bengaluru	3000.00	2010-06-05
[illegible]	[illegible]	Bengaluru	3000.00	2010-06-22
[illegible]	[illegible]	Bengaluru	3000.00	2010-06-22
[illegible]	[illegible]	Bengaluru	3600.00	2010-06-29
[illegible]	[illegible]	Bengaluru	3000.00	2010-07-01
[illegible]	[illegible]	Bengaluru	3000.00	2010-07-14
[illegible]	[illegible]	Bengaluru	3000.00	2010-08-23
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[illegible]	[illegible]	Bengaluru	5000.00	2010-09-26
[illegible]	[illegible]	Bengaluru	8000.00	2010-09-28
[illegible]	[illegible]	Dod Ballapur	5000.00	2010-10-05
[illegible]	[illegible]	Bengaluru	3000.00	2010-10-25
[illegible]	[illegible]	Bengaluru	3000.00	2010-10-29
[illegible]	[illegible]	Bengaluru	3600.00	2010-11-08
[illegible]	[illegible]	Bengaluru	3000.00	2010-11-15

Figure 6.3.2: Report Generated on Accidental Death in Bangalore District

CONCLUSION

Exposure of Company routine along with different situations that arise in the premises, created an opportunity for us to experience the corporate lifecycle. Thus helped us learn about the different process that is involved in creation of any software. This majorly included the Software Development Life Cycle (SDLC) process along with other tools and technologies that we got to learn. We got to learn the Importance of discipline, willingness to learn many tools and technologies. Implementation of the Software Development Life Cycle (SDLC) for the project that we created during the Internship made us realize the importance of the theory concept that we learnt during our engineering education.

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