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| **Tech Saksham**  Final Project Report  **WEB DEVELOPMENT** |  |  |

**“SRS Document Creator”**

**“RGUKT-SRIKAKULAM”**

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**ABSTRACT**

The lack of a software tool to automate the creation of a well-defined, Natural Language Software Requirements Specification (SRS) document is an obstacle to the process of efficient Requirements Engineering (RE). This paper provides an overview of a methodology and a novel software tool that attempt to formalize and automate the RE process, and it expands on the use of the SRS Documentation component of the tool that generates automatically a Well structured Natural Language SRS Document.

Keywords- automated SRS; automated RE; Natural Language RE

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**CHAPTER 1**

**INTRODUCTION**

* 1. **Overview**

The SRS (Software Requirements Specification) document generator is a project that aims to simplify and automate the process of creating SRS documents for software development projects. An SRS document is a comprehensive description of the intended purpose, functionality, and performance of a software system. It outlines the requirements that the software system must fulfill and serves as a blueprint for developers to follow during the development process.

The SRS document generator project seeks to streamline the process of creating SRS documents by automating the collection and organization of requirements data. The tool will allow project stakeholders to input their requirements in a structured format, which the tool will then compile into a complete SRS document. The generated document will include all the necessary information, such as the software system's scope, functional and non-functional requirements, system architecture, and performance metrics.

The SRS document generator will benefit software development teams by saving time and effort while ensuring that all requirements are documented accurately and comprehensively. Additionally, it will help to minimize the risk of miscommunication and misunderstanding among project stakeholders by providing a single, centralized source of truth for the software system's requirements.

* 1. **Features**

1.Input and Validation

2.Requirements Collection and Organization

3.Requirements Traceability

4.SRS Document Generation

5.Collaboration and Sharing

6.Integration and Interoperability

* 1. **Advantages**

1.Efficiency

2.Accuracy and Consistency

3.Traceability and Accountability

4.Collaboration and Communication

* 1. **Scope**

The scope of the project may vary depending on the needs and requirements of the software development project. Some projects may require additional features or modules, while others may require a simplified or streamlined version of the SRS document generator. The project should be designed to be scalable and flexible, so that it can adapt to the specific needs of each project.

* 1. **Future Work**

The project's future work could include enhancing the system's capabilities, such as incorporating natural language processing or machine learning algorithms to improve the quality and accuracy of the SRS documents. Additionally, the project could expand its compatibility with other software development tools and frameworks, such as Agile or DevOps methodologies.

**CHAPTER 2**

**SERVICES AND TOOLS REQUIRED**

**2.1 Services Used**

Graphical password authentication system can be used in various banking, shopping websites, email system etc. Graphical password authentication system can be time consuming, can need more storage space than text password and be prone to shoulder surfing attacks.

**2.1.1 Liberty Profile**

The liberty profile for a graphical password authentication system could vary depending on the specific implementation and requirements. However, some common considerations might include the types of images or visual patterns used, the sequence or order in which they are presented, the number of images in the sequence, and any additional security measures such as user verification or multi-factor authentication.

**2.2 Tools and Software’s used**

**Software Requirements**

• Operating system Windows

• Domain: Full stack

• Backend: PHP

• Database: MY SQL (XAMPP server)

**Hardware Requirements**

System: 7 th Generation

INTEL.i5 Hard disk: 128 GB+

1TB HDD storage

• Ram: 4GB/8GB

• Operating system: 64-bit

**CHAPTER 3**

**PROJECT ARCHITECTURE**

**3.1 Architecture**

The System Architecture of Software Requirement Specification consists two parts:

1.Front-end

2.Back-end

Front- end provides an interface to the user to give all the details of his project in order to generate a proper SRS Document based on the given details.

Back-end includes a database that will store all the credentials of the user which will help user to login in order to access the service provided

**CHAPTER 4**

**ARCHITECTURE BLOCKS DETAIL WORKING**

**4.1 Blocks**

Front End:

Front- end provides an interface to the user to give all the details of his project in order to generate a proper SRS Document based on the given details.

Backend:

Back-end includes a database that will store all the credentials of the user which will help user to login in order to access the service provided

**System Architecture**

User Interface: The user interface is the front-end component of the system that enables users to interact with the application. The user interface may consist of web pages, forms, or graphical user interfaces (GUIs). Users can enter or modify the requirements data, review and approve SRS documents, or generate reports.

Business Logic: The business logic is the core component of the system that implements the logic and rules for generating SRS documents from the requirements data. The business logic may consist of algorithms, rules engines, or decision trees that parse and analyze the requirements data, and generate SRS documents based on predefined templates and rules.

Application Programming Interfaces (APIs): The APIs are the interface between the user interface and the business logic. The APIs enable users to access and manipulate the requirements data, as well as to generate and retrieve SRS documents. The APIs may be implemented using RESTful APIs, SOAP APIs, or GraphQL APIs.

Database: The database is the storage component of the system that stores and manages the requirements data, SRS documents, and other artifacts. The database may use a relational database management system (RDBMS), such as MySQL or PostgreSQL, or a NoSQL database, such as MongoDB or Amazon DynamoDB.

Authentication and Authorization: The authentication and authorization component is responsible for managing user authentication and authorization. The component may use standard authentication protocols, such as OAuth or OpenID Connect, to authenticate users and grant access to the system.

Security and Compliance: The security and compliance component is responsible for ensuring the security and compliance of the system. The component may include features such as encryption, access control, auditing, or compliance reporting to ensure the system meets the security and compliance requirements.

Deployment and Infrastructure: The deployment and infrastructure component is responsible for deploying and managing the system infrastructure, including servers, network, and storage resources. The component may use cloud computing services, such as Amazon Web Services (AWS) or Microsoft Azure, to deploy and manage the infrastructure.

**CHAPTER 5**

**PROJECT BUDGET**

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| --- | --- | --- | --- |
| **Sr. No** | **Cloud Services and Coding Cost** | **Single Price (Rs)** | **Total** |
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|  |  |  |  |
| Total | | |  |

**CONCLUSION**

In conclusion, the SRS document generator project is a valuable tool for software development teams and project managers to streamline the process of creating and maintaining software requirement specifications. The project's features, such as automated document generation, version control, and collaboration tools, offer several benefits to users, including increased productivity, reduced errors, and improved communication and alignment among team members.The project's scope includes designing and developing a user-friendly interface that allows users to input requirements data, generate SRS documents, and collaborate with other team members. The project uses various technologies and services, such as programming languages, APIs, databases, and cloud computing services, to implement its functionality.

Overall, the SRS document generator project offers a valuable solution to a common problem in software development, and its architecture and features provide a solid foundation for further development and improvement.

**REFERENCES**

https://ieeexplore.ieee.org/document/8303625

https://ieeexplore.ieee.org/abstract/document/8558257

https://ieeexplore.ieee.org/document/9332593

https://ieeexplore.ieee.org/document/7417925

https://www.tutorialspoint.com/software\_engineering/software\_requirements\_specification.htm

https://github.com/m-rubik/SRSGenerator

**CODE**

**INDEX CODE:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Software Requirement Specification Document Creator</title>

<link rel="stylesheet" href="all.css">

<link rel="stylesheet" href="css/bootstrap.css">

<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.2.0/css/all.min.css" integrity="sha512-xh6O/CkQoPOWDdYTDqeRdPCVd1SpvCA9XXcUnZS2FmJNp1coAFzvtCN9BmamE+4aHK8yyUHUSCcJHgXloTyT2A==" crossorigin="anonymous" referrerpolicy="no-referrer" />

<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.2.0/css/fontawesome.min.css" integrity="sha512-RvQxwf+3zJuNwl4e0sZjQeX7kUa3o82bDETpgVCH2RiwYSZVDdFJ7N/woNigN/ldyOOoKw8584jM4plQdt8bhA==" crossorigin="anonymous" referrerpolicy="no-referrer" />

<!-- CSS only -->

<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-iYQeCzEYFbKjA/T2uDLTpkwGzCiq6soy8tYaI1GyVh/UjpbCx/TYkiZhlZB6+fzT" crossorigin="anonymous">

</head>

<body>

<div class="container-fluid one">

<div class="navbar">

<div class="logo">

<h1>SRSDC</h1>

</div>

<div class="menu">

<ul>

<li><a href="home.php" target="\_self">HOME</a></li>

<li><a href="login.php" target="\_self" class="log" style="background-color: lime; color: black; border-radius: 10px; padding: 5px 20px;">LOGIN</a></li>

</ul>

</div>

</div>

<div class="container">

<div class="row">

<h1 style="text-align: center; margin-top: 250px; color: white;">SOFTWARE REQUIREMENT SPECIFICATION DOCUMENT GENERATOR</h1>

</div>

</div>

</div>

<div class="container">

<p style="text-align: justify; margin: 100px 0px; font-weight: 500;">

"Software Requirement Specification Document Creator (SRSDC)" from the early stage of Computer Science Engineering we know the importance

of SRS documentas it is the base for every project that would may be a mini or major.SRS document is the beginning for any project and it

contain all the details about the project from customer's or client's point of view.SRS document plays role but while discussing with the client

there may be chance that we may forget some important lines/points or there may be chance of skipping of topics because remembering every

point is very hard but in our website there is no chance of forgetting as we remember you every topic regarding to the SRS document.SRSDC is the

easiest way to create your project document as we all know that time plays key in every field and reducing time for a work is known as developing

technology and in our website you can reduce the time for creating your project document.

</p>

</div>

<div class="container-fluid">

<div class="footer" style="background-color: black; color:white">

<div class="row">

<div class="col-md-6">

<ul style="display :block; padding: 10px 0px;">

<li>RAJIV GANDHI UNIVERSITY OF KNOWLEDGE AND TECHNOLOGIES</li>

<li>IIIT SRIKAKULAM</li>

<li>TEAM MEMBERS :

<ul style="display:block; font-size: 15px;">

<li>SANTOSHI S170031</li>

<li>SANDYA S170331</li>

<li>NAVYA SRI S170336</li>

</ul>

</li>

</ul>

</div>

<div class="col-md-5">

<div class="mt-5">

<a href="google.com" style="color:white;text-decoration: none; float: right; margin-right: 20px"><i class="fa-regular fa-envelope"></i> <span style="margin-right: 10px;">Gmail us</span></a><br>

<a href="google.com" style="color:white;text-decoration: none; float: right; margin-right: 20px"><i class="fa-brands fa-facebook"></i><span style="margin-right: 5px;"> Facebook</span></a><br>

<a href="google.com" style="color:white;text-decoration: none; float: right; margin-right: 20px" ><i class="fa-brands fa-instagram"></i><span style="margin-right: 5px;"> Instagram</span></a><br>

<a href="google.com" style="color:white;text-decoration: none; float: right; margin-right: 20px"><i class="fa-brands fa-square-twitter"></i><span style="margin-right: 29px;"> Twitter</span></a><br>

</div>

</div>

</div>

</div>

</body>

</html>

**SIGNUP CODE**

<?php include('server.php') ?>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

<link rel="stylesheet" href="css/bootstrap.css">

</head>

<style>

.one{

background: linear-gradient(to top, rgba(0,0,0,0.5),rgba(0, 0, 255, 0.2)), url(image.jpg);

background-position: center;

background-size: cover;

height: 100vh;

}

.form-control{

border-radius: 30px;

box-shadow: 3px 3px 5px gray;

}

.logo{

color: lime;

float: left;

margin-left: 20px;

border-bottom: 2px solid lime ;

border-left: 2px solid lime;

border-radius: 50px;

box-shadow: -2px 2px 5px limegreen;

padding: 0px 10px;

font-size:medium;

font-weight: 100;

font-family: 'Lucida Sans', 'Lucida Sans Regular', 'Lucida Grande', 'Lucida Sans Unicode', Geneva, Verdana, sans-serif;

}

</style>

<body>

<div class="container-fluid one">

<div class="row">

<div class="navbar">

<div class="logo">

<h1>SRSDC</h1>

</div>

</div>

</div>

<form method="post" action="login.php">

<?php include('errors.php'); ?>

<div class="container" id="r">

<div class="row">

<div class="col-lg-4 m-auto mt-5" style="border: 2px solid white; background-color: white; padding: 40px 60px; border-radius: 30px;">

<h4 style="text-align: center; margin-bottom: 50px;">Registration</h4>

<form action="" method="post">

<div class="form-group">

<input type="text" class="form-control mt-3" placeholder="Username" name="username" required value="<?php echo $username; ?>">

</div>

<div class="form-group">

<input type="email" class="form-control mt-3" placeholder="Email" name="email" required value="<?php echo $email; ?>">

</div>

<div class="form-group">

<input type="password" class="form-control mt-3" placeholder="Password" name="password" required>

</div>

<div class="form-group">

<input type="password" class="form-control mt-3" placeholder="Confirm Password" name="password" required>

<div class="row">

<div class="col"><button type="submit" name="submit" class="btn btn-success mt-5 form-control" style="background-color:#0D47A1">Register</button></div>

</div>

<div class="row">

<a href="login.php"><div class="col mt-4 pt-1 pb-1" style="border:2px solid white; border-radius:20px; color:white;background-color:#2196F3;text-align:center;">Login</div></a>

</div>

</form>

</div>

</div>

</div>

</form>

</div>

</body>

</html>

**LOGIN CODE:**

?php include('server.php') ?>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta http-equiv="X-UA-Compatible" content="IE=edge">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>

<link rel="stylesheet" href="css/bootstrap.css">

</head>

<style>

#r{

display: none;

}

.one{

background: linear-gradient(to top, rgba(0,0,0,0.5),rgba(0, 0, 255, 0.2)), url(image.jpg);

background-position: center;

background-size: cover;

height: 100vh;

}

.form-control{

border-radius: 30px;

box-shadow: 3px 3px 5px gray;

}

.logo{

color: lime;

float: left;

margin-left: 20px;

border-bottom: 2px solid lime ;

border-left: 2px solid lime;

border-radius: 50px;

box-shadow: -2px 2px 5px limegreen;

padding: 0px 10px;

font-size:medium;

font-weight: 100;

font-family: 'Lucida Sans', 'Lucida Sans Regular', 'Lucida Grande', 'Lucida Sans Unicode', Geneva, Verdana, sans-serif;

}

</style>

<body>

<div class="container-fluid one">

<div class="row">

<div class="navbar">

<div class="logo">

<h1>SRSDC</h1>

</div>

</div>

</div>

<form method="post" action="srs.php">

<?php include('errors.php'); ?>

<div class="container" id="l">

<div class="row">

<div class="col-lg-4 m-auto mt-5" style="border: 2px solid white; background-color: white; padding: 40px 60px; border-radius: 30px;">

<h4 style="text-align: center; margin-bottom: 50px;">Login</h4>

<form action="">

<div class="form-group">

<input type="text" class="form-control mt-3" placeholder="Username" name="usernamelogin" required>

</div>

<div class="form-group">

<input type="password" class="form-control mt-3" placeholder="Password" name="passwordlogin" required>

</div>

<div class="row">

<div class="col" style="float:right"><button type="submit" name="submit" class="btn btn-success mt-5 form-control" style="background-color:#0D47A1">Login</button></div>

</div>

<div class="row">

<a href="register.php"><div class="col mt-4 pt-1 pb-1" style="border:2px solid white; border-radius:20px; color:white;background-color:#2196F3;text-align:center;">Register</div></a>

</div>

</form>

</div>

</div>

</form>

</div>

</div>

</body>

</html>