#### PROFESSIONAL TRAINING REPORT

at

# Sathyabama Institute of Science and Technology (Deemed to be University)

Submitted in partial fulfillment of the requirements for the award of

Bachelor of Engineering Degree in

Computer Science and Engineering

By

# MANISH KUMAR MANI (Reg. No. 40110728)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING SCHOOL OF COMPUTING

SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHENNAI – 600119. TAMILNADU.

**NOV 2022** 



# **SATHYABAMA**

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#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

## **BONAFIDE CERTIFICATE**

This is to certify that this Project Report is the bonafide work of **MANISH KUMAR MANI (40110728)** who carried out the project entitled "**ONLINE PDF CONVERTER**" under my supervision from Aug 2022 to Oct 2022.

Internal Guide Mrs. Karthika J, M.Tech(Ph.D)

# **Head of the Department**

Dr. L. Lakshmanan, M.E., Ph.D.

Internal Examiner

**External Examiner** 

**DECLARATION** 

I, MANISH KUMAR MANI hereby declare that the project report

entitled ONLINE PDF CONVERTER, an Online Document

Converting Platform based on Web Application Development done

by me under the guidance of Mrs. Karthika J, M.Tech(Ph.D), is

submitted in partial fulfillment of the requirements for the award of

Bachelor of Engineering Degree in Computer Science and Engineering.

DATE:

PLACE: SIGNATURE OF THE CANDIDATE

# **ACKNOWLEDGEMENT**

I am pleased to acknowledge my sincere thanks to **Board of Management** of **SATHYABAMA** for their kind encouragement in doing this project and for completing it successfully. I am grateful to them.

I convey my thanks to **Dr. T. Sasikala M.E., Ph.D., Dean**, School of Computing, **Dr. S. Vigneshwari, M.E., Ph.D. and Dr. L. Lakshmanan, M.E., Ph.D., Heads of the Department** of **Computer Science and Engineering** for providing me necessary support and details at the right time during the progressive reviews.

I would like to express my sincere and deep sense of gratitude to my Project Guide Mrs. Karthika J, M.Tech(Ph.D), for her valuable guidance, suggestions and constant encouragement paved way for the successful completion of my project work.

I wish to express my thanks to all Teaching and Non-teaching staff members of the **Department of Computer Science and Engineering** who were helpful in many ways for the completion of the project.

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# **ABSTRACT**

This document converter project is a basic project made by using markup and scripting languages that aims to provide pdf editing and converting services to individuals or enterprises.

Converting document from one format to another is a headache. During lockdowns, when huge amounts of data was being transferred from one place to another, getting it to open in the specific format was a nightmare for the individuals. To solve this problem of interformatting, this project is made keeping in mind of the user's needs and providing a fast and efficient method to easily convert their documents.

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# CHAPTER-1 INTRODUCTION

A PDF is a Portable Document Format file format. The easiest way for us to sum that up, it to ask you to envision a folder. Inside that folder are the blueprints to the file, from fonts, and graphics to text and more. These elements compose the modern day PDF, and are the core building blocks upon which it is built. This file format was "discovered/invented" in the 1990's as a way to share information between users with different computer set-ups.

A document is a form of information that might be useful to a user or set of users. This information can be in digital and nondigital forms. Accordingly, a document can be either digital or nondigital. Different methods are used to store digital and nondigital documents.

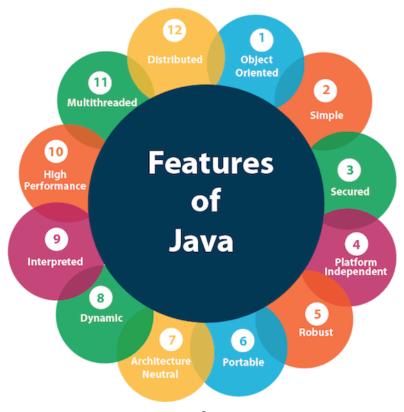
A nondigital or paper document can be physically stored in a file cabinet, whereas an electronic or digital document is stored in a computer as one or more files. Digital documents can also be part of a database. Electronic document management programs deal with the management, storage and security of electronic documents.

### **1.1 JAVA**

Java is a programming language and computing platform first released by Sun Microsystems in 1995. It has evolved from humble beginnings to power a large share of today's digital world, by providing the reliable platform upon which many services and applications are built. New, innovative products and digital services designed for the future continue to rely on Java, as well.

While most modern Java applications combine the Java runtime and application together, there are still many applications and even some websites that will not function unless you have a desktop Java installed. Java.com, this website, is intended for consumers who may still require Java for their desktop applications – specifically applications targeting Java 8. Developers as well as users that would like to learn Java programming should visit the <u>dev.java</u> website instead and business users should visit <u>oracle.com/java</u> for more information.

# 1.2 FEATURES OF JAVA



# 1.3 SPRING BOOT

Spring Boot is a project that is built on the top of the Spring Framework. It provides an easier and faster way to set up, configure, and run both simple and web-based applications.

It is a Spring module that provides the RAD (*Rapid Application Development*) feature to the Spring Framework. It is used to create a stand-alone Spring-based application that you can just run because it needs minimal Spring configuration.

In short, Spring Boot is the combination of **Spring Framework** and **Embedded Servers**.

In Spring Boot, there is no requirement for XML configuration (deployment descriptor). It uses convention over configuration software design paradigm that means it decreases the effort of the developer.

We can use Spring STS IDE or Spring Initialize to develop Spring Boot Java applications.

## 1.4 FEATURES OF SPRING BOOT

- •It creates **stand-alone** Spring applications that can be started using Java **-jar**.
- •It tests web applications easily with the help of different **Embedded** HTTP servers such as **Tomcat**, **Jetty**, etc. We don't need to deploy WAR files.
- •It provides opinionated 'starter' POMs to simplify our Maven configuration.
- It provides production-ready features such as metrics, health checks, and externalized configuration.
- •There is no requirement for **XML** configuration.
- •It offers a **CLI** tool for developing and testing the Spring Boot application.
- •It offers the number of plug-ins.
- •It also minimizes writing multiple **boilerplate codes** (the code that has to be included in many places with little or no alteration), XML configuration, and annotations.
- •It increases productivity and reduces development time.

# CHAPTER-2 INSTALLATION & SETUP

Following are the steps on how to install Java in Windows 10 for JDK 8 free download for 32 bit or JDK8 download for Windows 64 bit and installation

**Step 1)** Go to https://www.oracle.com/java/technologies/downloads/. Click on JDK Download for Java download JDK 8.

Step 2) Next,

- 1. Accept License Agreement
- 2. Download Java 8 JDK for your version 32 bit or JDK download 64 bit.
- **Step 3)** When you click on the Installation link the popup will be open. Click on I reviewed and accept the Oracle Technology Network License Agreement for Oracle Java SE development kit and you will be redirected to the login page. If you don't have an oracle account you can easily sign up by adding basics details of yours.
- **Step 4)** Once the Java JDK 8 download is complete, run the exe for install JDK. Click Next
- **Step 5)** Select the PATH to install Java in Windows... You can leave it Default. Click next.
- Step 6) Once you install Java in windows, click Close

# How to set Environment Variables in Java: Path and Classpath

The PATH variable gives the location of executables like javac, java etc. It is possible to run a program without specifying the PATH but you will need to give full path of executable like C:\Program Files\Java\jdk1.8.0\_271\bin\javac A.java instead of simple javac A.java The CLASSPATH variable gives location of the Library Files.

Let's look into the steps to set the PATH and CLASSPATH

- **Step 1)** Right Click on the My Computer and Select the properties
- Step 2) Click on advanced system settings
- Step 3) Click on Environment Variables to set Java runtime environment
- Step 4) Click on new Button of User variables
- **Step 5)** Type PATH in the Variable name.
- **Step 6)** Copy the path of bin folder which is installed in JDK folder.
- **Step 7)** Paste Path of bin folder in Variable value. Click on OK Button.
- **Step 8)** You can follow a similar process to set CLASSPATH.
- Step 9) Click on OK button
- **Step 10)** Go to command prompt and type javac commands.
- **Step 10)** If java is successfully installed, you will not get the ouput as 'javac' not found.

# **How to Create a Spring Boot Project in Spring Initializr**

- Step 1) Go to https://start.spring.io
- Step 2) Choose Maven/Gradle Project
- Step 3) Choose Language Java/Kotlin/Groovy
- Step 4) Choose Spring Boot version
- Step 5) Fill the Project Metadata
- Step 6) Select the dependencies to pre-add to the project [dev tools, thymeleaf,
- H2, JPA, Security]
- Step 7) Choose Packaging jar/war
- Step 8) Choose Java version
- Step 9) Click on Generate and a zip file will be downloaded.
- Step 10) Extract the zip folder and open that folder using your favourite IDE

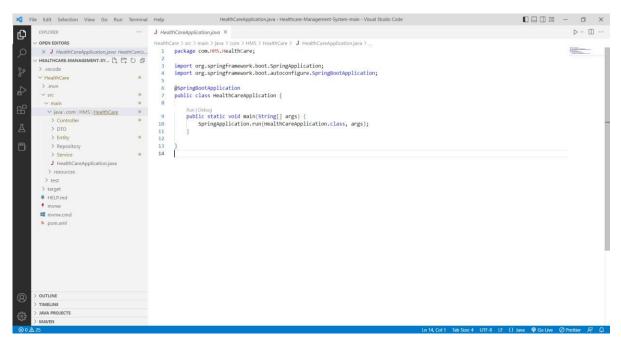


Fig. 2.1: Project Opened in VS Code

# CHAPTER-3 SYSTEM ARCHITECTURE

#### 3.1 ARCHITECTURE

The system architecture of this system is divided/split into two parts. One is the client side and the other is the server side. Client-side is the user interface whereas the server side is the combination of web pages written by HTML and the Spring framework.

We are implementing a web-based document conversion system to convert the documents in one format to another format. This application aims to ease all its users by providing them an easy, efficient and fast way to convert their document's format. This project is made using Spring Boot.

This project imports multiple dependencies which in turn provides more functionality to the conversion system. It provides many additional features that gives creative results, keeping the format of the document and its layout intact. The functionality and more features are explained in more detail in this chapter.

The main characteristics of the system are:

- •The user chooses one of the many options to convert the document. The user/client has got wide variety of options to choose from.
- •The user then uploads the document that is to be converted. The request is handled by our backend, which provides seamless experience to the user by doing the job as quickly as possible.

# 3.2 SEQUENCE DIAGRAM

The sequence diagram is used primarily to show the interactions between objects in the sequential order that those interactions occur. Much like the class diagram, developers typically think sequence diagrams were meant exclusively for them. However, an organization's business staff can find sequence diagrams useful to communicate how the business currently works by showing how various business objects interact. Besides documenting an organization's current affairs, a business-level sequence diagram can be used as a requirements document to communicate requirements for a future system implementation.

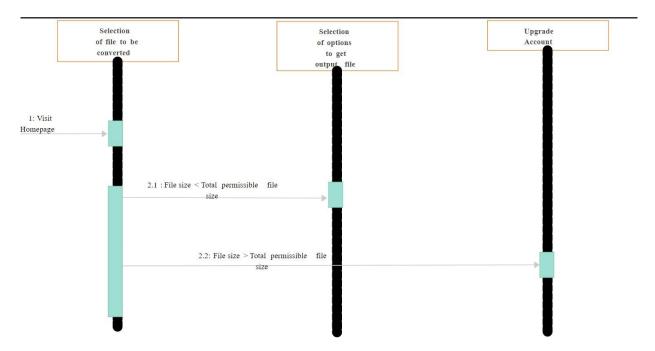


Fig. 3.2: Use Case Diagram

# CHAPTER-4 RESULT, PERFORMACE ANALYSIS

#### **4.1 LANDING PAGE**

A landing page is any web page that a consumer can land on, but in the marketing realm, it's usually a standalone page, distinct from your homepage or any other page, that serves a single and focused purpose. A landing page is a follow-up to any promises that you've made in your content. It is different from other pages on your website in that it follows both of these criteria: It has a form that allows you to capture a visitor's information in exchange for a desired offer.

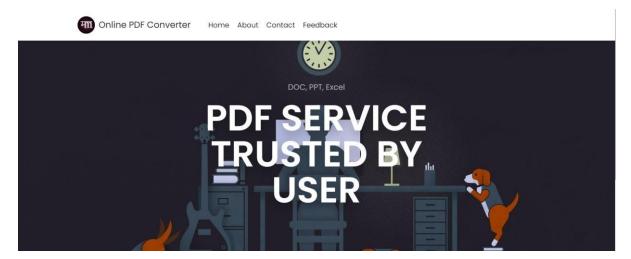


Fig. 4.1: Landing page

### **4.2 HOME PAGE**

A home page is any web page that a consumer can go to, but in the marketing realm, it's usually a standalone page, distinct from your landing page or any other page, that serves a single and focused purpose. A landing page is a follow-up to any promises that you've made in your content. It is different from other pages on your website in that it follows both of these criteria: It has a form that allows you to capture a visitor's information in exchange for a desired offer.

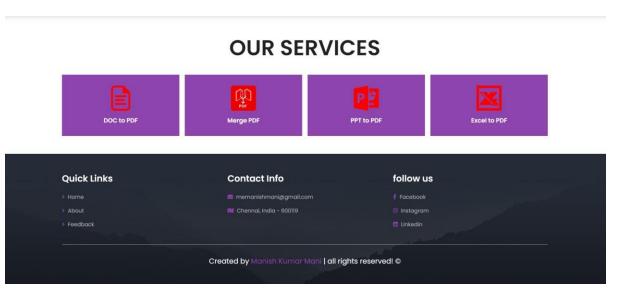


Fig. 4.1: Home page

### **4.2 ABOUT PAGE**

About Us page is a webpage which contains the information about the company or developer. It is the page where the developer pens down the answer to the most important question "WHY CHOOSE US?". The creator of the application would provide ample amount of reasons to choose this particular service over other services.

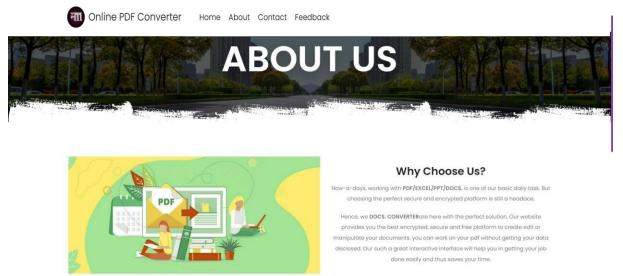


Fig. 4.1: About page

### **4.2 FEEDBACK PAGE**

Feedback page is a page where the user can pour their hearts out to appreciate the creation of the developer or provide the detailed explanation of the problems faced during the conversion process. The developer would try to fix the bug as soon as he get's the desired solution.

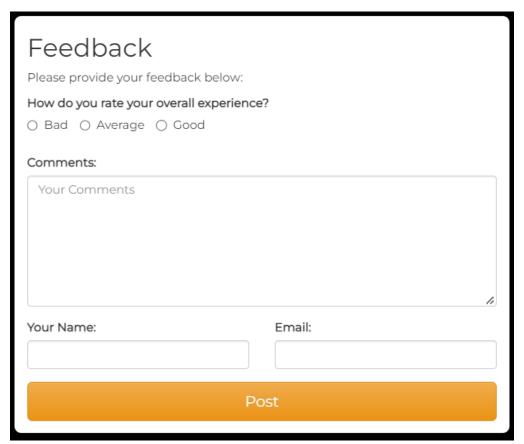


Fig. 4.1: Feedback page

## **4.2 USER REVIEWS**

Positive Reviews are the memento for the developer which the developer leaves no stone unturned to flaunt them. The negative reviews acts as a message to strive for perfection as there are always edge cases to work for. The developer then works towards the betterment of the application.

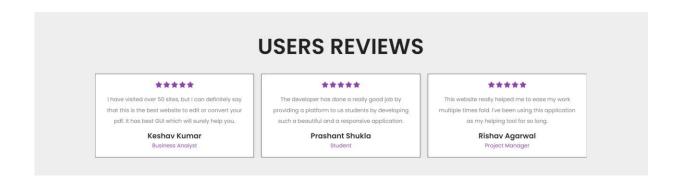


Fig. 4.1: User Reviews

### 4.6 SNAPSHOTS FROM APPLICATION

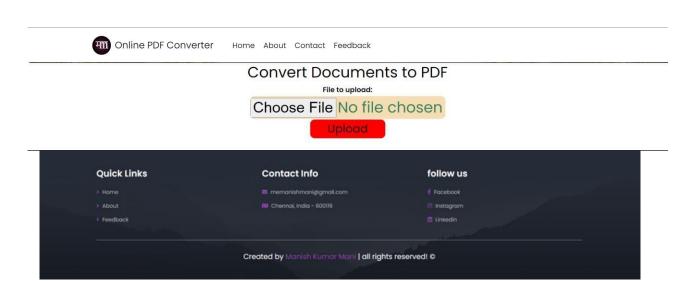
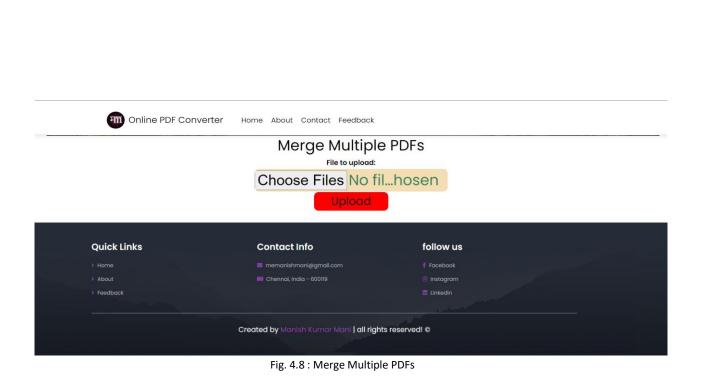


Fig. 4.7: Convert doc to pdf





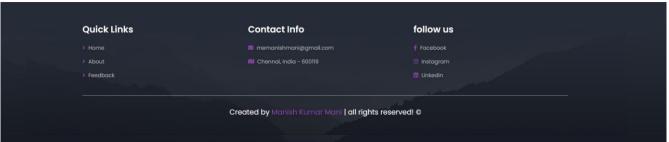


Fig. 4.7 : Convert PPT to PDF

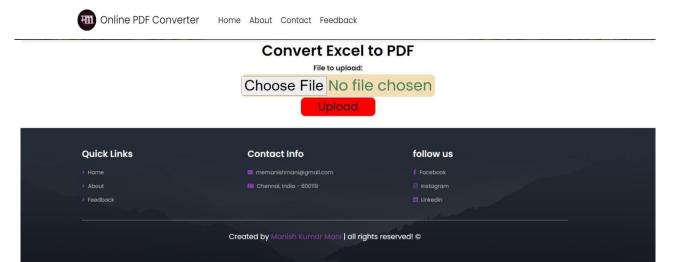


Fig. 4.8: Convert Excel to PDF

# 4.7 RESULT

With the steps shown in the above section, the DOCS Converter is made using Spring Boot and Thymeleaf templating engine.

This Web Application enhances business-to-customer strategies. This that is all about storage, efficiency, and react frameworks is the best choice, it's a lightweight, fast and stable platform. A great web application with the right technologies for building web applications.

# CHAPTER-5 SUMMARY & CONCLUSION

#### **5.1 SUMMARY**

This document converter project is a basic project made by using markup and scripting languages that aims to provide pdf editing and converting services to individuals or enterprises.

Converting document from one format to another is a headache. During lockdowns, when huge amounts of data was being transferred from one place to another, getting it to open in the specific format was a nightmare for the individuals. To solve this problem of inter-formatting, this project is made keeping in mind of the user's needs and providing a fast and efficient method to easily convert their documents.

This project uses many 3<sup>rd</sup> party dependency repositories. I would like to extend my gratitude to those developers who create projects for the goodwill of the community. This project also includes javascript libraries, that has impacted the lives of millions of people globally.

# **5.2 CONCLUSION**

The project Docs Converter was successfully concluded with the help of entire community of Stack Overflow. Special thanks to my friend Rishav Agrawal, without whom this project would have been not so successful. His skills and experience with the language was a boon to me.

The constraints that have been faced during the project development is time management and learning to build application using web platform. Document Converter application has the potential to be improved in the future. There are proposals that have been put forward and serve as a guide for improvement of this system.

# **REFERENCES**

- <a href="https://start.spring.io/">https://start.spring.io/</a> Spring Initializa
- <a href="https://www.thymeleaf.org/">https://www.thymeleaf.org/</a> Thymeleaf templating engine
- <a href="https://docs.spring.io/">https://docs.spring.io/</a> Spring Documentation
- <a href="https://mvnrepository.com/">https://mvnrepository.com/</a> Maven Repository
- <a href="https://stackoverflow.com/">https://stackoverflow.com/</a> Stack Overflow
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