**FlexiDocs - The Document Generator using MERN**

A Non-Syllabus Project Report submitted in partial fulfilment of the requirements of

the award of the degree of

**Bachelor of Technology**

**in**

**CSE(AI)/AI&DS/CSE (Cyber Security)**

by

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Under the guidance of

**Ms. Appoorva Bansal**

**Assistant Professor**



(Session 2024-25)

**Department of Advance Computing**

**Poornima College of Engineering**

ISI-6, RIICO Institutional Area, Sitapura, Jaipur – 302022

**Jan-June, 2025**

**DEPARTMENT CERTIFICATE**

This is to certify that Mr. / Ms. / Mrs. **Vikash Kumar**,registration no. **PCE22CY062**, **Utkarsh Jangid**,registration no. **PCE22CY060**, **and Ravi Jangid,** registration no. **PCE22CY049** of the IV/VI semester Department of Advance Computing, has submitted this Project report entitled **FlexiDocs - The Document Generator using MERN** under the supervision of **Ms. Appoorva Bansal**, working in division of Advance Computing as per the requirements of the Bachelor of Technology program at Poornima College of Engineering, Jaipur affiliated by Rajasthan Technical University.

Dr. Amol Saxena Ms. Appoorva Bansal

Head, Department of Advance Computing NSP Guide

**CANDIDATE’S DECLARATION**

We hereby declare that the work which is being presented in this project report entitled **FlexiDocs - The Document Generator using MERN** in the partial fulfilment for the award of the Degree of Bachelor of Technology in CSE(AI)/AI&DS/CSE(Cyber Security), submitted in the Department of Advance Computing, Poornima College of Engineering, Jaipur, is an authentic record of our own work done during the period from **Jan 2025 to June 2025** under the supervision and guidance of **Ms. Appoorva Bansal, Assistant Professor**.

We have not submitted the matter embodied in this project report for the award of any other degree.

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Dated:

Place: Jaipur

**SUPERVISOR’S CERTIFICATE**

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dated: Ms. Appoorva Bansal

Place: Jaipur Assistant Professor

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# ABSTRACT

**For Reference:**

Cryptography or cryptology is a study of methods for safe communication within outsiders ‘view which can be called as adversaries. Also we can say that cryptography is tied in with constructing and investigating protocols that keep outsiders or the general population from checking private messages; dissimilar viewpoints in data security, for example, information secrecy, information integrity, verification, and non-repudiation are keys to today’s cryptography. Present day cryptography occurs at the union of the controls of arithmetic, computer science, and electrical designing. ATM cards, computer passwords, and electronic business are some well-known utilizations of cryptography.

Visual-Text Cryptography suggests a methodology where the text data is incorporated into an image in such a way that it does not show any signs of data embedding inside an image. Text data cryptography is an important tool to transmit the data from one end to another end with low bandwidth.

Here in this work, Image Transformations will be used to process the image as well the text also so as to make their matrix elements range similar to make it more secure and reliable. Also, various attacks will be applied over the image to test its robustness, and it will be tested on how many attacks it can stand with and keeps the data securely.

A combination of DWT and DCT transformations will be used for both the text and images processing, also there will be a lot of mathematical series which will enable the code to enhance the security and the reliability. Content will be installed inside the sub-groups of the DCT prepared pictures and the content implanted will likewise be the DCT managed.

Keywords: DWT, DCT, Image Processing, etc.

**CHAPTER 1**

**INTRODUCTION**

* Introduction chapter shall have a brief paragraph on the background information and what is discussed in the chapter ahead.
* Next it will start with Headings & Sub headings on the background information (Theoretical Concepts) about the thesis problem, Various Issues & Challenges, Methods/ Techniques in general available for the specific problem under consideration. You may consider the theoretical material on various methods / approaches / algorithms found in the research papers or not found.
* It should be written in own language rather than copying and pasting.
* No images / figures should be copied / pasted unless very important and needed, but with resource citation.
* At last you have to close the chapter with what you discussed in brief and what is going to be discussed in the next chapter

**CHAPTER 2**

**LITERATURE SURVEY**

A literature review in a project report is a section where you summarize, analyze, and synthesize existing research, theories, and findings that are relevant to your project. The purpose of the literature review is to show the current state of knowledge on the topic, identify gaps in the research, and position your project within that context.

In this section, you typically:

1. **Identify Relevant Studies**: Review books, journal articles, research papers, and other sources that are related to your project’s topic.
2. **Summarize Key Findings**: Highlight important findings from those studies, including methodologies used, conclusions drawn, and any contradictions or debates within the field.
3. **Analyze and Synthesize**: Compare and contrast different viewpoints, methodologies, and results. Discuss the strengths and weaknesses of existing research.
4. **Establish a Framework**: Show how the existing literature informs your own research question and how it contributes to the development of your project.

The literature review helps you demonstrate that you understand the topic thoroughly and that your project builds on or addresses gaps in existing knowledge.

If you're writing one, you might also need to think about how to structure it—such as grouping the literature by themes, theories, or methodology.

* First para shall contain brief information about how many research papers from which publishers ranging from which year to which year has been reviewed and what is discussed in the chapter ahead.
* Next with heading 2.1: **Review Process Adopted**- Discuss in brief importance and significance of review process adopted. It may have sub headings as 2.1.1, 2.1.2 etc
* Heading 2.2: **Categorical Review** of Literature- Here read all summaries and finings, issue wise findings, common findings prepared earlier, reorganize if needed / if categorization is not proper, add research paper contents in appropriate sections / issues reviewed in this semester and modify corresponding sections. It will have sub section headings as 2.2.1, 2.2.2 etc
* Heading 2.3: **Issue wise Solution Approaches**- Prepare Issue wise comparison tables / graphs based on papers dealing with common problem, parameters / variables and discuss them with inference why there is variation in results and what type of relation does exist. Sub headings shall have numbers 2.3.1, 2.3.2 etc.
* Heading 2.4: **Strengths and Weaknesses**- Modify Strengths and weaknesses consequent to writing section 2.2 & 2.3 and put them as 2.4.1: Strengths and 2.4.2: Weaknesses.
* Gaps in the published research: Details of what has not been covered in the earlier research
* Problem Statement and objectives
* Last para will discuss briefly what has been presented and what will be covered in the next chapter.
* At Last put a table of all research papers arranged categorically showing- Authors- Year-Issue / Sub Issue/Approach (Method)/Results-Limitations.
* Total number of papers for review is depends on number of students in project. It is recommended that every student will review at least five IEEE or equivalent papers. So if there are four students in group then in totality 20 papers should be reviewed. Review of papers depicts the current implementations that overcome the previous problems and limitations of the project, and draws the attention and focus on the foreknowledge work that would be conducted based on the ongoing work at present. It must be clear and simple to understand.

After completion of individual paper’s literature review, a consolidated literature review has to be published as per given table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.No. | Paper Tile | Authors-Year-Issue | Approach/ Method | Results & Limitations |
|  |  |  |  |  |

**CHAPTER 3**

**PROPOSED METHODOLOGY**

The **Proposed Methodology** in a project report is a section where you describe the approach, methods, and techniques you plan to use to conduct your research or complete your project. It's essentially your game plan for how you'll achieve the objectives and goals of the project.

In this section, you should include:

1. **Research Design**: This outlines whether your project is qualitative, quantitative, or mixed-methods. You should specify if you're conducting experiments, surveys, interviews, case studies, or using any other type of approach.
2. **Data Collection Methods**: Describe how you will collect data. Will you be using primary data (e.g., surveys, interviews, experiments) or secondary data (e.g., literature, existing databases)?
3. **Tools and Instruments**: If you're using specific tools, software, or instruments to gather or analyze data (e.g., statistical software, laboratory equipment, surveys, or questionnaires), mention these here.
4. **Sampling**: If applicable, explain how you will select participants or samples for your study. What criteria will you use? How many samples or participants will you have?
5. **Data Analysis**: Describe the techniques you will use to analyze the data (e.g., statistical analysis, thematic analysis, modeling). Will you be using any specific software for data analysis?
6. **Timeline**: A brief outline of the project’s stages and how long each phase will take. This helps set expectations for progress and completion.
7. **Limitations**: If there are any limitations or constraints to your methodology (such as time, budget, access to resources, or other factors), mention them here.

The proposed methodology section is crucial because it demonstrates the systematic approach you will take to address the research problem or project objectives. It shows that your plan is feasible and will yield reliable and valid results.

**CHAPTER 5**

**EXPERIMENTAL RESULTS & ANALYSIS**

This chapter describe the statistical analysis and calculations done, simulation environment, results gained, and so on. The appropriate information should always be accompanied with pictorial representations, tabular demonstrations, diagrams, Images, photos other representations and depictions of the project, with good resolution and clarity. It also includes the comparison of result obtained with result available in base paper or previous approaches. The sequence is as follows:

* First para shall describe about that you are going to discuss the experimentations carried out in line with the Design specifications and objectives.
* Discuss categorically scenario wise results obtained for each evaluation parameter under different headings as 5.1, 5.2, 5.3 etc.
* **Discussion** on what was targeted and what could be achieved
* Next: **Comparison with other contemporary works**- Discuss what were the results of other works and what you could get & why whether inferior / superior

Close this chapter summarizing the outcome of above discussion

**CHAPTER 6**

**CONCLUSION AND FUTURE SCOPE**

The conclusion and **Future Scope** part summarize the whole report by highlighting all the chapters and their significance and the importance of the project and about the achievements.

The future scope is interlinked with conclusion. The conclusion drawn from the project report can be further implemented in the recommendation section to overcome the constraints of the project.

Sequence is as follows:

* The first para of this chapter should discuss the review outcome & problem justification.
* Second para- discuss about thesis objectives, experimental results, success in meeting the objectives.
* At last state how your work is different from others

**REFERENCES**

**PLAGIARISM REPORT**

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