**Instructions for Students**

**Two rar files are given:**

1. **B.Tech-Project-Report-FinalThesis-PhaseI-Template.rar**
2. **B.Tech-Project-Report-FinalThesis-PhaseI-Sample.rar**

**Refer the sample “B.Tech-Project-Report-FinalThesis-PhaseI-Sample.rar” to understand various files and commands.**

**Use “B.Tech-Project-Report-FinalThesis-PhaseI-Template.rar” to fill up your content.**

**Contents of the rar file**

**Files To be filled by the student:**

|  |  |
| --- | --- |
| **File name** | **Content** |
| main.tex | The main tex file to generate the complete report (this file has reference to other tex files) |
| projectdetails.tex | Project Title, Project Guide name and designation, Students rollnos with name and Panel members names. The file is filled with some sample details |
| abstract.tex | Abstract |
| chapter1-Introduction.tex | Introduction (Background, Problem Statement, Specific Objectives, Findings) |
| chapter2-LiteratureSurvey.tex | Literature Survey of existing systems, existing works, existing algorithms, existing experiments and results |
| chapter3-ProposedSystem.tex | Proposed System (System Architecture , System Specification, Methodology, Implementation) |
| chapter4-ResultsandDiscussion.tex | Results and section |
| chapter5-ConclusionandFutureWork.tex | Conclusion and FutureWork |
| bibliography.tex | List of references |
| abbr.tex | List of abbreviations |

**Folders in the rar file (Figures):**

This folder contains the image files of the pictures which are added to the report.

To add a picture to your report, put the corresponding image file in this file and it will be referred inside the report using \includegraphics command.

Note: Don’t delete the amrita log file which is in “Figures” folder (Amrita-Logo.png)

**Files which are defining the structure of the report, generating table of contents and defining style file (Note: Don’t modify the content of following files)**

|  |  |
| --- | --- |
| **File name** | **Content** |
| thesisclass.cls | Defines format of the chapter , font size , page margins, bibliography style formatting |
| tableofcontents.tex | Generate table of contents |
| ThesisCover.tex | Defines the format of cover page and bonafide certificate and acknowledgemenr |
| lgrind.sty | format source code of different programming languages for LaTeX |

**Steps to enter the content and generate the Report**

1. Open “projectdetails.tex” and enter your Project Title, Project Guide name and designation and also student names and roll no under the respective commands. Also, enter Panel members names.

Depending upon the number of students either add a row or remove a row inside \authors command.

Copy Title, supervisor, designation, authors which are entered for review2 and paste here

\title{ Project Title }

\def\supervisor{ Guide Name }

\def\designation{ Designation}

\def\authors{

RollNo \enspace NAME\\

List of students rollnos with names with roll no for Cover Page

RollNo \enspace NAME\\

RollNo \enspace NAME\\

RollNo \enspace NAME\\

}

List of students names with roll no for Bonafide certificate

\def\authorsbon{

Name (RollNo), Name (RollNo), Name (RollNo), Name (RollNo),

and Name (RollNo),

}

\def\panelmembers{

Name of PanelMember1, Name of PanelMember2, Name of PanelMember3, Name of PanelMember4 and Name of PanelMember5

List of panel names for acknowledgement

}

1. Open “abstract.tex” and enter your abstract
2. Open “chapter1-Introduction.tex” and enter Background, Problem Statement, Specific Objectives and Findings under the respective headings.

\chapter{Introduction}

Copy and paste from the file which was prepared for review2 and incorporate the necessary changes

\section{Background}

\section{Problem Statement}

\section{Specific Objectives}

Note:

* + - Don’t remove the commands \chapter and \section.
    - Use \section command to add additional sections.

1. Open “chapter2-LiteratureSurvey.tex” and enter your content. Use \section command to add sections the chapter.

For example:

Copy and paste from the file which was prepared for review2 and incorporate the necessary changes

\chapter{LiteratureSurvey}

\section{Existing Systems}

\section{Existing works}

\section {Existing Technologies}

Note: Don’t remove the commands \chapter

1. Open “chapter3-ProposedSystem.tex” and enter System Architecture, System Specification, Methodology and Implementation under respective sections.

Copy and paste from the file which was prepared for review2 and incorporate the necessary changes

\chapter{Proposed System}

\section{System Architecture}

\section{System Specification}

\section{Methodology}

\section{Implementation}

1. Open “chapter4-ResultsandDiscussion.tex” and enter your content. Refer the sample which is available in B.Tech-Project-Report-FinalThesis-PhaseI-Sample.rar

**Add sections if required using \section command**

\section{sectionname}

1. Open “chapter5-ConclusionandFutureWork.tex.” and enter your content. Refer the sample which is available in B.Tech-Project-Report-FinalThesis-PhaseI-Sample.rar
2. Open “abbr.tex” and enter your list of abbreviations using the following command

**\nomenclature{abbreviation}{FullForm}**

**For example,**

**\nomenclature{EST}{Eastern Standard Time}**

**\nomenclature{UTC}{Coordinated Universal Time}**

1. Open “bibliography.tex” and enter your list of references. Add \bibitem command before every reference. The \bibitem command should be inside \begin{thebibliography}{9} and \end{thebibliography}

Copy and paste from the file which was prepared for review2 and incorporate the necessary changes

For example:

b1 and b2 refers the numbering for each reference. In this example 2 references are given. To add one more reference add \bibitem{b3} and etc.

\begin{thebibliography}{9}

\bibitem {b1} Danilo Valerio, Alessandro D’Alconzo, Fabio Ricciato, Werner Wiedermann, “Exploiting cellular networks for road trafficestimation: a survey and a research roadmap”. IEEE 2009.

\bibitem{b2} Hafiz Abdur Rahman, Jose R. Marti and K. D. Srivastava, “Road Traffic Forecasting through Simulation and Live GPS-feed from Inter vehicle Networks”. IEEE 2012.

\end{thebibliography}

Note: Don’t remove \begin{thebibliography}{9} and \end{thebibliography} commands

Note: remove unnecessary \bititem

Note : To cite these references inside the chapters use \cite command. For example to cite the first reference inside the chapter1, goto the place of citation and add “\cite{b1}”

1. To add figures inside the chapters use the \includegraphics command. The “\caption” command specifies the caption for the figure. The “\label” command is used to specify the label for the figure so that the figure can be referred inside the content.

\begin{figure}[h!]

\vspace{0.1in}

\begin{center} \includegraphics[height=4in,width=6in,scale=1.5]{imagefilename}

\caption{caption}

\label{fig:label}

\end{center}

\end{figure}

For example,

To add the following the image inside the chapter, paste the corresponding image file (“Chapter1-Figure1-GoogleTrafficView.png”) inside the Folder “Figures”.

Then, go to corresponding chapter and the place of insertion inside the chapter.

Then, add the following

\begin{figure}[h!]

\vspace{0.1in}

\begin{center}

includegraphics[height=4in,width=6in,scale=1.5]{Chapter1-Figure1-GoogleTrafficView.png}

\caption{Google Traffic View}

\label{fig:googleview}

\end{center}

\end{figure}

In this example, name of the file is “Chapter1-Figure1-GoogleTrafficView.png”

Caption is “Google Traffic View”

Label is “fig:googleview”

The result of the above command in the final report is



Now to refer this image inside the content use “Figure \ref{fig:googleview}” . The result of this command is as

“Google Maps provides the Traffic View only to the major roads (Figure 1.1) in major cities”

1. To Add table use table and tabular as follows:

\begin{table}[h!]

\begin{center}

\caption{tablecaption}

\vspace{0.1in}

\begin{tabular}{|c|c|c|}

\hline\hline

Col1heading & Col2heading & Col3heading \\

\hline

C1R1 & C2R1 & C3R1 \\

C1R2 & C2R2 & C3R2 \\

\hline

\end{tabular}

\label{label}

\end{center}

\end{table}

For example:

Create a table with 3 columns with 3 columns. Caption is “Latitude and Longitude of Map Locations”.

\begin{table}[h!]

\begin{center}

\caption{Latitude and Longitude of Map Locations}

\vspace{0.1in}

\begin{tabular}{|c|c|c|}

\hline\hline

MapLocation & Latitude & Longitude \\

\hline

A & 37.944 & 121.47 \\

B & 37.924 & 120.178 \\

C & 37.924 & 120.178 \\

\hline

\end{tabular}

\label{table:locationtable2}

\end{center}

\end{table}

Result of the above commands:



1. To insert the equations:

Example1 :

\begin{equation}

E=mc^2

\end{equation}

The above commands produce:



Example 2:

\begin{equation}

x = \frac{\alpha \* \beta}{c\*n}

\end{equation}

The above commands produce:



1. Add Appendix if required as separate chapter .

Create a new file with the name appendix.tex. The first of the appendix.tex should be \chapter{Appendix}and then enter your content.

Finally, include the appendix into the main.tex by adding the \include{appendix} after \include {bibliography}

1. Finally, go to main.tex. Compile and generate the pdf file.

* Type of binding: Spiral binding
* Hard copies only for students
* No hard copy for the department
* Submit softcopy to department