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.

```
\title{   Project Title  }
\def\supervisor{ Guide Name }
\def\designation{  Designation}
\def\authors{
            RollNo \enspace  NAME\\
            RollNo \enspace  NAME\\
            RollNo \enspace  NAME\\
            RollNo \enspace  NAME\\
}

\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
}
```

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

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

List of students names with roll no for Bonafide certificate

List of panel names for acknowledgement

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

\chapter{Introduction}

\section{Background}

\section{Problem Statement}

\section{Specific Objectives}

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

Note:

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

4. Open "chapter2-LiteratureSurvey.tex" and enter your content. Use \section command to add sections the chapter.
   For example:

\chapter{LiteratureSurvey}

\section{Existing Systems}

\section{Existing works}
\section {Existing Technologies}

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

Note: Don't remove the commands \chapter

5. Open "chapter3-ProposedSystem.tex" and enter System Architecture, System Specification, Methodology and Implementation under respective sections.

\chapter{Proposed System}

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

\section{System Architecture}

\section{System Specification}

\section{Methodology}

\section{Implementation}

6. 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}

7. Open "chapter5-ConclusionandFutureWork.tex." and enter your content. Refer the sample which is available in B.Tech-Project-Report-FinalThesis-PhaseI-Sample.rar
8. 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}

9. 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}

   For example:

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

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}"

10. 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]{imagefile
name}
```

```
\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

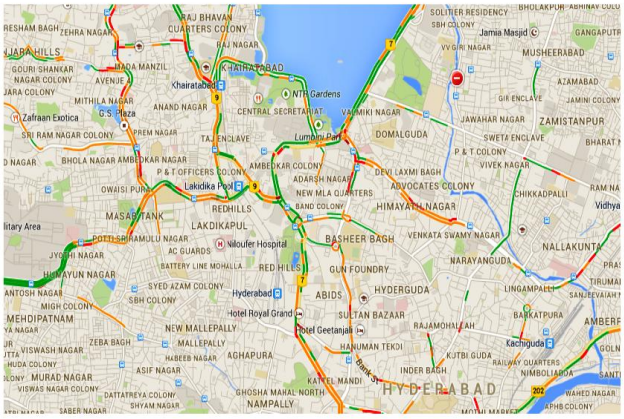

Figure 1.1: Google Traffic View

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”

11. 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:

Table 1.2: Latitude and Longitude of Map Locations

MapLocation	Latitude	Longitude
A	37.944	121.47
B	37.924	120.178
C	37.924	120.178

12. To insert the equations:

Example1 :

```
\begin{equation}
   E=mc^2
\end{equation}
```

The above commands produce:

$$E = mc^2 \tag{1.1}$$

Example 2:

```
\begin{equation}
   x  = \frac{\alpha * \beta}{c*n}
 \end{equation}
```

The above commands produce:

$$x = \frac{\alpha * \beta}{c * n} \tag{1.2}$$

13. 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}

14. 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