CEE538 Computer-Aided Project Management

Lab Reports

Typically, in each Lab Assignment for CEE538 you will use Microsoft Project Pro and Primavera P6 Pro to schedule an example project and produce a Lab Report that includes your scheduling and control reports that match the examples provided with the Lab Assignment.

What is the overall objective of the Lab Reports?

The overall objective of the Lab Reports is for you to be able at the end of the course to combine all your Lab Reports into a single PDF file that will serve as your project management portfolio that you can give (or email) to a potential employer to showcase your knowledge and abilities. Your portfolio will also serve as a collection of examples of good practices.

What should I submit for each Lab Assignment?

To achieve this objective, you will submit two things for each Lab Assignment:

(A) Lab Report (produced as one PDF file and submitted on Canvas).
(B) Zip File (this includes all the files for the Lab Assignment and will be emailed to photios@umich.edu as a backup and reference for your printed Lab Report).

How shall I produce my Lab Report?

You will print the individual pages of your Lab Report using Microsoft Word, Microsoft Project, and Primavera P6 Pro. You will first print these individual pages to separate PDF files. You will then combine these separate PDF files into a final single PDF file (that will have multiple pages).

Because PDF files are independent of the software that created them (i.e., Microsoft Project Pro and Primavera P6 Pro), PDF files can be viewed and printed later, even if you or someone else (like a potential employer) do not have access to the original programs.

How should my Lab Report be Organized?

Each Lab Report should include two parts.

1. Problem Statement & Discussion
2. Scheduling Reports produced by MS Project and P6.

What are the contents of the "Problem Statement & Discussion"?

The "Problem Statement & Discussion" should be one or more pages that describe the Lab Assignment (and the individual Project Pro and P6 Pro reports that follow) in a self-contained manner so that a knowledgeable person (such as a potential employer) should be able to understand the Lab Report without the need for additional references.

The "Problem Statement & Discussion" should be typed in Microsoft Word and then printed to a PDF file. (Instructions for printing to PDF files appear below.)

What are the contents of the Scheduling Reports?

Each Lab Assignment includes examples for all the Scheduling Reports that you will need to produce using MS Project Pro and Primavera P6 Pro.

Your task will be to use MS Project Pro or Primavera P6 Pro to produce your own Scheduling Reports that are similar to the supplied examples.

You will then use MS Project Pro or Primavera P6 Pro to print each Scheduling Report to its own separate PDF file. (Instructions for printing to PDF files appear below.)

How will my Scheduling Reports be different from those supplied as examples?

Your Scheduling Reports should be very similar to those supplied as examples. The differences should be minor, such as your name, the dates that the reports were produced, etc.

What kind of information should each Scheduling Report include?

Each Scheduling Report should provide information about the course, the student name, the software used, the project shown, the type of schedule shown, the report layout (or report view), the date the project starts and finishes, the date the report was produced, etc. Most of this information will be printed in the "header" and "footer" of each printed Report page.

Examples of the required information will be provided in the sample Scheduling Reports included with each Lab Assignment.

The objective is that each Scheduling Report should provide complete information to the reader that describes the project information presented and answers all related questions.

How do I print to a PDF file in Windows 10 or 11?

All Windows 10 or 11 computers include a printer called "Microsoft Print to PDF" that allows any application (i.e., Microsoft Word, Microsoft Project Pro and Primavera P6 Pro) to print to a PDF file. When you print to the printer "Microsoft Print to PDF" you will be asked to provide the name of the PDF file that you wish to create. The application will then send all the output to be printed into that PDF file.

Adobe Acrobat Pro

An agreement between UM and Adobe allows all students to install Adobe software on their personal computers for free. Start at the link below:

- https://its.umich.edu/computing/computers-software/adobe-creative-cloud

One of the Adobe programs you must install is Adobe Acrobat Pro which allows you to edit PDF files and to print from any application to a PDF file. After installing Acrobat, the printer "Adobe PDF" will allow you to print directly to a PDF file from any application (similar to the "Microsoft Print to PDF" printer in Windows 10 or 11).

How can I combine multiple PDF files into one PDF file for my Lab Report?

To combine multiple PDF files into one PDF file for your Lab Report use the program Adobe Acrobat Pro or the program Bluebeam Revu both of which are available on CAEN (along with P6 and MS Project) and which are also available to you at no cost to install on your own Windows computer. Instructions on how to obtain and install Bluebeam Review are available on the course website on Canvas.

How do I create and work with a Zip file?

A "Zip" file is a type of an "electronic archive" that can contain several other files (that could even be organized into folders). A free program for making "Zip" files (in any version of Windows) is "7zip". It is installed on CAEN and is also available for free at www.7-zip.org.

The File Explorer in Windows 10 or 11 includes native support for Zip files and treats them exactly like folders. If you double-click a Zip file in Windows 10 or 11, File Explorer will open it and show the files and folders inside the Zip file like a regular folder. You could then copy, move, rename, and delete files or folders into or out of the Zip file, etc.

To create a new Zip file, use File Explorer in Windows 10 or 11 to select the files and folders to be included in the Zip file, and in the File Explorer ribbon, select: Share > Zip.

What should the Zip file for each Lab Assignment contain?

For each Lab Assignment you will create one Zip file that should contain the following files:

1. The PDF file for your Lab Report.
2. One or more Microsoft Project Pro files (with file extension ".mpp") that were developed for this Lab Assignment.
3. The current version of each student's Primavera P6 Pro SQLite database. The username and password for this database should be the default: "admin".

What would be a complete example of the Zip file for a Lab Assignment?

As an example, the Zip file submitted by student Frank Johnson for Lab1 would be as follows:

- Lab1-Johnson_Frank.zip

  (the above Zip file should contain the following files)

  i. Lab1_Report-Johnson_Frank.pdf
  ii. Lab1.1-Johnson_Frank.mpp
  iii. Lab1.2-Johnson_Frank.mpp
  iv. Lab1-Johnson_Frank-PrimaveraXXyyDB_Personal.db

What should I do with the Zip file for a Lab Assignment?

On or before the day the Lab Assignment is due, email the Zip file to photios@umich.edu.

Remember that your official submittal is the PDF file for the Lab Report submitted on Canvas, not the Zip file.

Remember to include the Lab Number and your name in the filename of the Zip file. E.g.,

- "Lab1-Lastname_FirstName.zip"