Collaborative Writing

CSC222 Geographic Information Systems

12 November 2012

Open a terminal window in Linux. Then make sure that you are in the folder that contains your copy of our project.

```
cd
cd courses/cs222/notes
```

Make sure that you have saved and committed your most recent changes to the project.

```
hg status
```

You will see a list of files.

Files that are preceded by a question mark are files that Mercurial is not tracking. These may include, for example, backup files created by Emacs (e.g., `paper.tex~`) and files created by LaTeX(e.g., `gis-book.aux, gis-book.bbl, gis-book.log,` and others). We do not need to track the history of those files.

If you have created new files that you do want to make a part of our project (e.g., "my-new-map.png"), then add that file to the repository.

```
hg add my-new-map.png
hg commit -m "added new map to project"
```

An A or M in front of the name of a file is an indication that you have added or modified a file but have not yet committed the change. If there are such uncommitted changes, commit them.

```
hg commit -m "a little description of the change"
```

Make sure that your project has only a single branch. This is an extra precaution—if we are doing everything correctly, this step should not be necessary.

```
hg heads
```

If you see more than one head, merge the heads.

```
hg merge
```

Now you can synchronize your version of the project with the master version.

```
hg pull
```

You will see a prompt to update or merge.

```
hg update

- or -

hg merge
```

Finally, compile our book and view the result.

```
make-book
evince gis-book.pdf &
```

Continue adding to your paper. Proof read, correct errors, and revise. Do all of this in `paper.tex`. You might also want to add bibliographic items to `sources.bib`. (You need not include annotations with these new entries in your bibliography.)

```
cd your-name
emacs paper.tex &
```

Periodically commit your changes, recompile the book, and view the typeset result. Remember that the `make-book` script is in the `courses/cs222/notes` folder—that's one level up from the folder that holds your `paper.tex` and `sources.bib` files.

```
hg commit -m "revised introduction in paper"
cd ..
make-book
```

You can include images in your paper. Let's suppose that your name is "your-name" and the name of your image file is "treasure.png" (or "treasure.jpg").

```
\begin{figure}
\begin{center}
  \includegraphics[width=10cm]{your-name/treasure}
  \caption{Treasure map.}
  \label{treasure-map}
  \end{center}
  \end{figure}
```

You can refer to your paper.

```
See figure~\ref{treasure-map}.
```