

## 21M359 Music Composition Software Cheat Sheet

Creating a new system:

- Copy and rename template\_system.py
- Fill in sections

Creating a new module:

- Copy and Rename TemplateModule.py
- Add **“from <your module’s name> import \*”** to modules.py
- Fill in generate\_output(self)

Instantiate a module:

- variable = ModuleName(<name>, <list input ports>, <list output ports>)**  
ex: A = TransposeUpOne(“TUO1”, [“in0”, “in1”], [“out0”])

Connect two modules:

- <module A>.connect(<output port of A>, <module B>, <input port of B>)**  
ex: A.connect(“out0”, B, “in0”)

Get the input of a port in a module:

- self.get\_input(<port>)**  
ex: self.get\_input(“in0”)

Set the output of a port in a module:

- self.set\_output(<output>, <port>)**  
ex: self.set\_output(<output data>, “out0”)

## Getting Started with Git

Installing Git: <http://git-scm.com/book/en/Getting-Started-Installing-Git>

Create a Github account at <https://github.com/signup/free>

Email your username to [cdolan@mit.edu](mailto:cdolan@mit.edu)

To checkout the project:

**git clone** <https://github.com/cgdolan/21M359Fall2012.git> **music\_composer**

Changed files --(add)--> Staging Area --(commit)--> Local Repo --(push)--> Github Repo

1. **git status**: see what files are changed
2. **git add <filename>**: add an edited file to the staging area  
--OR--  
**git add -A**: add all edited files to the staging area
3. **git commit -am "<message>"**: commit staging area changes to the local repo
4. **git pull**: get latest changes from the class repo  
Note: you may need to manually resolve conflicts in each file and git commit -a again
5. **git push**: commit local repo changes to the class github repo