Notes: ACM GraphicsProgram

Let's take a look at a Graphics Library created by the Association for Computing Machinery's Java Task Force: [acm.graphics package (Links to an external site.)Links to an external site.](https://cs.stanford.edu/people/eroberts/jtf/javadoc/student/acm/graphics/package-summary.html)

To start using this package, we need to download the [acm.jar](https://shoreline.instructure.com/courses/1648255/files/104389035/download?wrap=1) file ([What is a JAR file? (Links to an external site.)Links to an external site.](https://en.wikipedia.org/wiki/JAR_(file_format))) which contains a bunch of stuff in it that we can use to make graphical programs relatively quickly.

Let's start by taking a look at an example

Files to download and place in the same folder ([all files as zip](https://shoreline.instructure.com/courses/1716878/files/109709260/download?verifier=kMO8NxFjefwG7qm29GrcN2HONfh2PEmvsAzPSgT4&wrap=1)):

* acm.jar
  + we also need to link this in JGrasp:
  + Settings --> PATH/CLASSPATH --> Workspace --> New --> CLASSPATHS Tab --> Add acm.jar
* Block.java
* BlockProgram.java

What's going on?

* What is a JAR file?
* What is GraphicsProgram?
* What is GObject?
* What is happening in Block?
* What is happening in BlockProgram?

Things to try

* Can you change the starting location?
* Can you change the direction of the Bock moves?
* Can you create a new constructor for Block that takes the original position (x,y) as well as the width of the Block?
* Can you add multiple blocks in the BlockProgram?
* Can you create an array of blocks in the BlockProgram?
* Can you give each Block in the array a random starting location and starting width?
* Can you make each Block move in a random direction each "cycle" of the run?
* What else can you do?