

Programming Assignment #6

Due: April 11 (Saturday) at 11:59 PM

In Lectures 29/Lab 9, we creating a movie of throwing a ball off the Eifel tower. For this assignment I want you to write a similar program that produces a short movie of any family-friendly topic of your choice. It must however satisfy the following basic requirements:

- follows the general structure of the `ballOffEifelTower.py` program
 - a `main` function that selects a picture for the background and sets other parameters (e.g., `startX`, `speed`, etc.), calls your function `makeMyMovie` which returns the finished movie, and plays the movie.
 - your function `makeMyMovie` should use JES's `setMediaPath()` to allow the user to indicate where the movie frames are to be stored, generate at least a couple seconds worth of frames, make the frames into a movie, and return the movie
- Additionally, the frames generated by your function `makeMyMovie` should contain at least one “drawn” item that moves across the sequence of frames. The motion should be somehow related to the parameters passed into `makeMyMovie` from the `main` function.

The `ballOffEifelTower.py` program would meeting these requirements, but you **MUST** do something different. Some possible ideas:

- multiple objects moving in different directions and rates (like program 121 on page 317)
- using a small or partial photo as the moved object (like program 122 on page 318 where Guzdial's head is moved)
- an object not only changes position, but performs some action across the frames, e.g., stick figure walking, bird's wings flapping, football tumbles end-over-end through the air, etc.

EXTRA CREDIT for movies that are especially creative and well done, i.e., just don't meet the minimum requirements above.

The steps for the homework submission system are:

1. Design, write, debug, and test your program in a folder called `hw6`. (It can contain subfolders for the movie frames and probably will.) “Zip” the folder `hw6` into a single file called `hw6.zip` (In Windows, right click on the `hw6` folder and select `Send to | Compressed (zipped) folder`)
 2. Log on to the submission system at: https://www.cs.uni.edu/~schafer/submit/which_course.cgi
 3. Select the course and section number of "CS 1120, Media Computation, Fienup". Click the "Continue".
 4. Select the homework that you wish to submit: "HW 6: Moving Object Movie". Click the "Continue" button.
 5. Specify how many extra files you want to submit. Just leave it at 0. Click the "Continue" button.
 6. Upload your programs by Browsing and selecting your `hw6.zip` file. Click the "Continue" button.
 7. The next page reports on the status of the upload(s). You can always continue to upload a better version of the program until the deadline. The newer file will replace an older file of the same name.
- (If you miss the deadline, you'll need to submit it as above, but select “Late Homeworks” in step 4 above.)