

CISC 110 Project Requirements

Due Dates (due at the end of your lab in the given week):

- Storyboard: Due in week of Oct. 29 (week 8 of the term)
- Phase 1 Code: Due in week of Nov. 5 (at least 10% of your implementation)
 - Up to 20% deducted from final project mark if 10% is not completed by this date
- Phase 2 Code: Due in week of Nov. 19 (at least 70% of your implementation)
 - Up to 20% deducted from final project mark if 70% is not completed by this date
- Final Project: Due in week of Nov. 26 by the end of your lab
- In-Class Demos: On Nov. 29 and 30, the second two classes of week 12

You will show your Storyboard and code for Phase 1 and Phase 2 to your TA in your lab. You will also hand in a copy of your Storyboard, your Phase 2 code, your Final Project code, and a user manual and credits (see below). You will give an in-class demo of your project during the last week of classes.

You are allowed to work on the project with one other person, if you wish.

If you would like to work with a partner, but don't know who, please send me email. If someone else also sends a request, I'll give you each others' email .

CAUTION 1: Avoid designing a project that is too complicated. This is a first-year course and you only have a few weeks to implement your project. A good strategy is to pick something simpler than what you think is possible, but which has possibilities for future expansion. For instance, a quiz game could have extra questions or extra levels added, a web site could include further links to pages to be developed later, etc. Then if you have time, you can add these.

CAUTION 2: ALWAYS **back up all of your work** frequently, BOTH to another file on your computer AND to a USB memory stick or other drive separate from your computer. Every year there is someone who loses their project near the due date. One year someone dropped their laptop. The year before that someone's hard drive failed. Another student's .fla file suddenly became

corrupted and would no longer open. Late penalties applied for these students if they weren't able to re-create their project before the deadline. Back-ups are also useful when you make changes that don't work and cause other things to stop working correctly. Save a back-up after each significant change and keep a SERIES of those back-ups, so you can revert to an earlier version if needed.

Storyboard Requirements

A film storyboard is essentially a large comic of the film or some section of the film produced beforehand to help visualize the scenes and find potential problems before they occur. Often storyboards include arrows or instructions that indicate movement. In the case of interactive media, it is the layout and sequence in which the user or viewer sees the content or information. In the storyboarding process, most technical details involved in crafting a film or interactive media project can be efficiently described either in picture, or in additional text.

Project Design Process

1. Before deciding on a project, you should brainstorm about possibilities. Don't choose the very first project idea you have. First consider many possibilities. Brainstorm by thinking about different types of animations (short films, cartoons, advertisements, web sites, video games, teaching modules, etc.), different topics, different audiences (children, teens, university students, older adults), and different animations you've seen that you like. Make a chart of your brainstorming process. This could be drawn by hand or you could make a chart on a computer with a mapping program like cmap, available free at <http://cmap.ihmc.us/download/>
2. Next choose 3 or 4 of the most promising project ideas and work out enough of the details of what would be required to be able to choose among them. Choose one of these as your project.
3. Design the main scenes of your chosen project and draw very simple, rough sketches (stick figures, etc.) to illustrate what you have in mind. You could draw these on individual sheets of paper, so that you can move them around to manipulate them to figure out what you want.
4. Add notes about the interaction that will occur. You could add notes to the individual scenes to show which scene will lead to which other scene or you could create a separate list of all the interactions and refer to scenes by number or name. When developing this, post-it notes can be useful.
5. List how you will use various features of Flash and ActionScript (required features and extra options).

Storyboard Marking Scheme

Hand in the following as part of your storyboard to show you've gone through all of the design process steps listed above. **Hand in photocopies of drawings, not originals**, since your TA will keep your storyboard for future reference.

Your storyboard is worth 7 % of your final mark, but will be marked out of 10, with up to 2 marks for each of the following:

- Chart showing brainstorming of different ideas/topic areas/audiences you thought of.
- Short descriptions (~1 page) of 3 or 4 different possible projects, with a **clear indication of which project you have decided to implement**
- Very simple hand-drawn pictures of your main scenes
- Description of interactivity
- List of how you will use various Flash and ActionScript features

The storyboard is an important stage in the design process, but once you submit it, you are not limited to using exactly and only what you've designed. A natural part of the design process is to make changes as you start implementing, when you discover unforeseen problems and when you think of unforeseen possibilities. One of the reasons for specifying very simple sketches (in addition to saving you time) is to avoid becoming too invested in the details of your design at too early a stage. It's important to stay flexible during the early stages of the design process.

Final Project Requirements

Required Flash Animation and ActionScript Features

The list below of required features has been kept small intentionally in order to give you maximum flexibility. You will need to use **many** other features from Flash animation or ActionScript, but you may choose whether to focus more on Flash animation or more on ActionScript features.

For instance, some examples of additional ActionScript features you might include are while loops, for loops, timers, frame loops, dynamic objects, hit tests, and drag and drop.

Also, notice that most of the required features are plural, so **several of each** are required.

Be sure to include significant interactivity. At least 25% of the work on your project must involve interactivity: creating buttons and mouse listeners or keyboard listeners, setting up scenes that you will go to when certain conditions are true, etc.

You may incorporate code from the labs in your final project, but that code will not count as having fulfilled any of the basic project requirements, unless it has been modified significantly.

- Motion Tweens
- Shape Tweens
- Layers and Symbols
- Composite MovieClips with their Own Timeline
- MouseEvents
- A KeyboardEvent
- If-else statements
- Variables and assignment statements
- Many function definitions not including listeners (i.e., not button-handler and keyboard-handler functions). These are functions that you call.
- At least one function that returns a result value.
- An array
- Timeline control via gotoAndStop, gotoAndPlay, etc.

Additional Final Project Requirements

In addition to the animation and ActionScript features, you must hand in the following along with your final project files:

1. **A user manual (a hardcopy is required)**. This explains what your project does and how to use it, including which file to execute. Also, it must describe how it fulfills each of the basic requirements: list each basic requirement & say how it is met. A template for the user manual will be given, which must be followed.

The purpose of the user manual is to make it easy for the markers to find everything you've done, so that you get credit for all of your work. Use point form in your manual to make it easier to find information.

2. **A list of credits (an electronic copy is required).** This must be a list of all images, etc., that you have incorporated from outside sources, even if they are public domain. Also, you must list sources of ideas (other than those from the course lectures, labs, and textbooks).

It is not acceptable to incorporate any ActionScript code or tweens from other sources. Also do not use code snippets.

It is fine to get code and animation ideas from other sources, but then you must create your own version and credit the source. Otherwise, you are plagiarizing the work of others and engaging in academic dishonesty, for which there are strong academic penalties at Queen's.

Using code snippets does not show that you know how the code works. To receive credit for your code, you must show that you do know how it works.

Keep a list of your sources as you work.

Final Project Marking Scheme

Technical: 60%

- Meets basic ActionScript and Flash requirements: 25%
- User Manual and Credits List: 5%
- Extra Flash and ActionScript Features: 30%

Quality: 40%

- Quality of Design and Implementation / Animation / Creativity

Example Ideas for Projects

- A website show-casing your own work (photographs, art work, music, ...)
- An extension of one of the lessons you completed, for instance an interactive birthday card with buttons embedded in the scene that cause new scenes or actions when they're selected.
- An interactive advertisement for an event or product or charity.
- A quiz game similar to The Impossible Quiz at <http://www.notdoppler.com/theimpossiblequiz.php>

- Some other simple video game. Note that video games will tend to require more ActionScript than other projects, so choose a video game if you'd like to learn more ActionScript, but be sure to keep it simple.
- An interactive political cartoon that attempts to convince the viewer of your point of view.
- A learning module that visually illustrates concepts from your field of study.
- An interactive film or story or experience