

ActionScript Course project work: Multi-touch (gesture-based/physical interaction) IxD2 2011 (ActionScript 3.0)

‡ Description

The project-work is an exercise where the student will have a chance to practice improved programming skills from the course, analogue parts like: “Thinking”/Planning, analyzing/solving problems and team-working. The project-exercise includes phases like: planning/research, designing, implementation and tests. The Multi-touch project work focuses on: Designing/coding basic prototypes for a touch-device, working with touch-events, gestures, interactivity and final tests on a touch-device. Students can work individual or in pair. The project-work also includes documentation and presentation. All documentation should be published and available on the wiki/webpage.

The student will also have a chance to choose and practice other “gesture-based/physical interaction” methods during the project-part.

‡ Goal

Student should increase skills in terminology & techniques for Multi-touch with a focus on: Designing/coding basic prototypes for a touch-device, working with touch-events, gestures, interactivity and final tests on a touch-device.

‡ Flash-based Multi-touch for IxD2 project:

- **Flash CS5/CS5.5 Multi-touch API**
(Hardware: ASUS Android Tablets, HP TouchSmart, Android phones, iPhone, iPadetc)

↓ Project examples & inspiration

Here are a couple of examples that can serve as inspiration for the Multi-touch project:

- A basic game with some win and lose strategy
- Animations with physics controlled by touch-events and/or gestures
- Touch-based navigation prototype
- Google Map application with touch-events
- Focus on *true* Multi-touch (+2 fingers)
- LEGO: Design and code a MT-prototype/game based on your LEGO-project
- Media application/prototype: Sound, image and/or video apps controlled by touch-events
- An OOP-based application/prototype or animation
- Design your own gesture(s) - planning & research

↓ General recommendations for all projects

- **Keep it simple!** Don't make too advanced projects (based on your own skills). It's better to have just *one* working game-level than ten "messy levels" totally out of control.
- Try to include project-phases like: Brainstorming, sketching (pen & paper), planning/research, design, implementation and final tests.
- Have a thought about: Navigation, menus, interaction, screen-size, resolution, scenes, usability and accessibility when you plan and set up your project.
- File-size: The main 'fla-application' should not be too large (KB). Load all media-content into the app (web-application). Try the "Simulate download" function during the work process.
- Project/File-versioning & Backup: Set up a folder with your name on the device, and always use this. Try to have a good structure over the work-files, with day-to-day versioning etc.

- Tests: The functionality of the application/system/game should be tested both during the developing process, but also before the final presentation (use the teacher or class-mates as test-pilots)
- Problems & solutions: Try to put a note in your documentation about how you solved problems, about the help you got during the project-work etc. For example: Internet-sites, blogs, help from the teacher/tutor or class-mates etc. This could be useful if someone else's trying your "approach".

⚡ Using code from internet

If you are using code from the internet; Try to have a basic knowledge about *central parts* of the code. How to use the code, how to tweak it in your own project, how to run and test it (include this in the documentation as well).

⚡ Touch-devices (publishing)

ASUS Android-tablets plus the HP TouchSmart-computer will be the "main-devices" for the course. (It is not mandatory to publish on a mobile-device).

⚡ Presentation

There will be a (group) presentation of each project on Friday 7/10 9.00-15.00, followed by discussions in class. The documentation should include both video and text documentation (PDF).

⚡ Documentation

The project should have the following documentation:

- Short general presentation of the project: Text/description, images, diagrams (PDF)
- Video documentation (published on Vimeo embedded in the Wiki)

Publish your Video (embedded) on the Wiki - plus documentation (PDF), and project files (ZIP). Place it under 'Student work'. All original-videos should also be available.

Name the file: Flash_actionscript_course_lxD2_2011_your_name_multitouch_project

Deadline: Friday 7/10, 15.00.