

Team workshop with LEGO



+ Description

This is a team-exercise where the students/participants will have a chance to improve their skills in how to: *Think, analyze & plan*, describe and practice: Game design/storytelling, (OOP) programming, interaction/system/concept design, team working etc – by designing and building small/basic LEGO models. There will be around 3-4 people in each group. It's possible to borrow pieces between the groups. No programming skills needed. A basic documentation need to be done for every project. Keep it simple and short. If possible: Bring your own laptops, cameras etc (for the documentation part).

The workshop will start with a short introduction followed by a 3 hour exercise (25/3). Work room/location for the exercise part: Make yourselves as comfortable you can! The second day (26/3) includes a small exhibition of the LEGO projects (models and documentation).

+ Scenario

You are working as an Interaction designer for a world-leading company. The company have a new stunning concept idea for a product, and have set up a small project-team (1 Interaction designer, 1 concept designer and 1 programmer). The company put a lot of trust in the team, and gives you almost free hands for designing a prototype for the new product. It's a really tight deadline. The team has only a couple of hours to come up with the prototype - then the concept should be demonstrated in front of: Big bosses (with ties), investors, CEO's, project managers, lead designers, developers etc. The budget is set to 2 million dollars. Together in the team you decide to use LEGO for prototyping the product. So with a lot of inspiration, creativity & positive energy you and the guys in team kick-off the work...

If you succeed, the new product will be launched all over the world!

+ Structure & workshop phases

To be as efficient as possible, it's recommended that your group use a good structure for the project work, with phases like:

1. Inspiration, brainstorming & research
2. *Think, analyze & plan* (break down problems into smaller pieces)
3. Design & build the LEGO model
4. Test the model/workflow
5. Final documentation (see documentation part)
6. Exhibition/presentation (projects/models + documentation)

Note: It could be a good idea to have a "running" documentation during the work process

+ Project examples & inspiration

You have basically free hands for the project/content. Here are a couple of examples that can serve as inspiration:

- Adventure Game (level design, ex: Indiana Jones)
- Spaceship (space game)
- Design of a futuristic car
- Interaction design of an application/system/machine
- Navigation system
- Small/basic system for physical computing
- Multimedia presentation
- A specific (OOP) programming or animation example
- House with people and animals
- Prototype/Portfolio application

+ Documentation

The last step is to make a basic documentation of the work process (one document/group), with topics like:

- General presentation of the project: Text outline/description and functionality of the project/model (max 15 lines)
- Photo and text documentation
- Video-clips/animations (for the motion/flow)
- The *Thinking, analyzing and planning-part* of the project
- A basic flowchart and/or pseudo-code for a specific part of the project
- The team-work: The roles, collaboration, problems, solutions etc
- Technical description (programmers): Classes, objects & methods etc
- Future: Improved functionality, technique and usage for the project
- General: Good/bad, problems, solutions, LEGO, time, locations etc

+ Exhibition/presentation

The second day (26/3) includes a small exhibition of the LEGO projects. The presentation should include the LEGO model and the documentation on paper (or on screen in digital form) – also (if possible) project videos and photos.

+ About the LEGO

We are using a combination of standard (Creator) LEGO blocks and some new *technical* LEGO such as: Star Wars, Mars Mission, Atlantis, Space Police, and Indiana Jones etc.



Don't forget to have fun! ☺
/Thomas

