3rd semester MMD 2017. Description of the elective educational component: Game development.

This document outlines content and learning objectives for the elective.
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2. **Scope and content**

“Game development” gives students a basic understanding of games and game development, and enables the students to create 2D games in the Unity game engine. Tuition and tasks will be partly based on the program's core subjects but also have a cross-disciplinary focus on developing game concepts and prototypes.

The elective provides a broad introduction to the understanding of players, game types and aesthetics as well as the business part of the gaming industry, combined with a focus on enabling the students to create working prototypes of 2D games in the puzzle and platform genre.

"Game Development" is a good introduction for students interested in understanding the games industry and basic game mechanics, as well as a platform to learn game development.

The elective will build upon the technologies you have already worked with on the first two semesters, and thus focuses on using C# and JavaScript in the Unity game engine.

The focal point of the elective is that students in self-chosen development teams of 2-3 people work to develop their own concept for a game and implement it.

At the end of the elective educational component you will pitch your game to a panel of external stakeholders, read: professionals with insight and experience in game production, who will provide fast and relevant feedback on your production. This might also be an opportunity for you to make an impression on possible future internship hosts.

The elective educational component concludes with an internal group exam, which is assessed in accordance with the 7-point scale. ECTS-scope: 10 ECTS

3. **Learning objectives**

*Knowledge*. The student has knowledge about:

- Game development and production planning.
- The competencies necessary to develop computer games, their roles and responsibilities.
- Genres, Typology and Psychology related to game development.
- Platforms and development tools.
- Game design.
- Core theory and methodologies related to monetization and experience economy;
Skills. The student can:

- Design content, menu systems and feedback mechanisms in relation to games.
- Implement basic techniques related to game development in Unity, including manipulation of objects, based on user input, registration and visualization of score, and graphical and audial feedback on events.
- Make use of basic techniques for test and bug fixing at a functional level.
- Select, describe and look up literature in relation to the project.

Competencies. The student can:

- Design and implement a working prototype of a game, including menu systems and score in Unity.
- Relate and put the development process into perspective with the program’s core subjects.

4. Duration

The elective starts on Monday the 28th of August and ends on the 6th of October 2017.

5. Assignment description

You must work on developing and implementing a game concept in self-defined groups. This includes planning, designing and programming a game, as well as analysing the market to identify trends and possibilities in both regards to design and business strategies. You have to:

- analyse the market to identify trends in design and business strategies,
- develop a concept for a game for a digital platform,
- implement the game as a functional prototype in the Unity engine.

6. The elective’s language

In this elective educational component teaching and dialogue in class is in English. All teaching materials, in form of slides, suggested reading and similar, are in English.

The exam’s language depends on the group’s composition. In case there is at least one international student in the group, the exam’s language is English, otherwise the group can decide between English and Danish.

7. Subject to change

This description of the elective is preliminary and subject to adjustments and amendments relating, but not limited to, scope, content and learning objectives.