804250 - P3VJ - Project III

Coordinating unit: 804 - CITM - Image Processing and Multimedia Technology Centre
Teaching unit: 804 - CITM - Image Processing and Multimedia Technology Centre
Academic year: 2017
Degree: BACHELOR’S DEGREE IN VIDEO GAME DESIGN AND DEVELOPMENT (Syllabus 2014). (Teaching unit Compulsory) BACHELOR’S DEGREE IN VIDEO GAME DESIGN AND DEVELOPMENT (Syllabus 2014). (Teaching unit Compulsory)
ECTS credits: 6
Teaching languages: Catalan, Spanish, English

Teaching staff
Coordinator: Ricard Pillosu Gonzalez

Prior skills
One or more of this list:
- Coding in C++ for video games in 3D.
- Modeling and animating in 3D.
- Knowledge on video game design methodologies.
- Management of development teams.
- Building QA pipelines and maintaining a continuous integration environment.

Teaching methodology
The teacher will take the role of a studio owner and will ask for an idea to be developed. The students, working as a production team, will split into departments and work in the lines of a realistic game studio. Following the SCRUM methodology, the teacher will evaluate every sprint individually.

Learning objectives of the subject
Learn how to embark in the development of a 3D video game of mid-big size.
Learn how to work in an extensive team divided by departments and coordinate with the rest.
How to structure the development like a micro AAA studio.

Study load

<table>
<thead>
<tr>
<th>Total learning time: 150h</th>
<th>Hours large group:</th>
<th>18h</th>
<th>12.00%</th>
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<tr>
<td></td>
<td>Hours medium group:</td>
<td>30h</td>
<td>20.00%</td>
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<tr>
<td></td>
<td>Hours small group:</td>
<td>0h</td>
<td>0.00%</td>
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<td></td>
<td>Guided activities:</td>
<td>12h</td>
<td>8.00%</td>
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<td>Self study:</td>
<td>90h</td>
<td>60.00%</td>
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## Content

<table>
<thead>
<tr>
<th>Section</th>
<th>Learning time</th>
<th>Description</th>
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</table>
| **Concept Discovery** | 10h           | - Theory classes: 4h  
                   |                               | - Self study: 6h       |
| **Vertical Slice**   | 30h           | - Theory classes: 12h  
                   |                               | - Self study: 18h      |
| **Production Planning** | 5h            | - Theory classes: 2h  
                   |                               | - Self study: 3h       |
| **Alpha 1**         | 20h           | - Theory classes: 8h  
                   |                               | - Self study: 12h      |

**Concept Discovery**:
- First iteration on the technical documentation
- Getting the technology required ready
- First pass on the GDD

**Vertical Slice**:
- First playable demo that test the basic technology needed.
- Gameplay test and GDD iteration.
- Testing the technology with biggest risks.

**Production Planning**:
- Generation of all needed tasks for the development (backlog).
- Estimation of all the tasks.
- Risk management.

**Alpha 1**:
- Creation of the first level of the game:
  - Iteration in gameplay code / technology / UI
  - Environment art / characters / animations
  - Iteration in level design and player progression.
### Alpha 2

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<th>Learning time: 20h</th>
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<tr>
<td>Theory classes: 8h</td>
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<td>Self study: 12h</td>
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**Description:**
- Repeating the same process from Alpha 1 to create the second level of the game:
- Retrospective and process improvement.
- Backlog review.

### Alpha 3

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<tr>
<td>Theory classes: 8h</td>
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<tr>
<td>Self study: 12h</td>
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**Description:**
- Repeating the same process from Alpha 1 to create the second level of the game:
- Retrospective and process improvement.
- Backlog review.
- Content creation for game last level.

### Polish

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<tbody>
<tr>
<td>Theory classes: 4h</td>
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<tr>
<td>Self study: 6h</td>
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**Description:**
- Last improvement to the game:
- Art polish.
- Code optimizations.
- Tide up documentation.

### Beta

<table>
<thead>
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<th>Learning time: 10h</th>
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<tr>
<td>Theory classes: 4h</td>
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<tr>
<td>Self study: 6h</td>
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**Description:**
- Follow a strict beta process:
- Stabilization rounds.
- Bug distribution.
- Continuous integration.
The subject is purely practical and will use an individualized evaluation per milestone:
Concept Discovery 10%
Vertical Slice 1 10%
Vertical Slice 2 10%
Production Planning 5%
Alpha 1 10%
Alpha 2 10%
Alpha 3 10%
Polish 5%
Beta 10%
Gold 20%

Bibliography

Basic: