Carleton University School of Computer Science

INTENSIVE GAME DEVELOPMENT PROJECT
COMP4900

Course Outline (Summer 2020)

Instructor: Connor Hillen
Email: connorhillen@cmail.carleton.ca
Time: Tue. Thu. 18:00 – 21:00
Place: Online (refer to cuLearn)

Course Page: http://culearn.carleton.ca/

Office Hours: 17:00 - 18:00 (Tue. Thu.) on cuLearn BigBlueButton (one hour prior to lecture). The timing is subject to change within the first week of classes according to student availability and may be reduced pending utilization. Additional office hours can be arranged via email and will be held on cuLearn BigBlueButton.

Attendance: Attendance is critical in this course. The majority of lectures consist of meetings necessary for the completion of the project and meeting participation will be graded.

Textbooks: There is no mandatory textbook for the course, but a few texts referenced within the course are listed below for your interest. These are available as e-books via the Carleton library or their official websites. Each of these cover a different topic which may be useful to know in the course and may be occasionally referenced. More references may be made available on cuLearn.

- (Safari Books) Clinton Keith, Agile Game Development with Scrum, Addison-Wesley Professional, 2010.
- (Online) Robert Nystrom, Game Programming Patterns, Genever Benning, 2014.

Online Resources: Class notes, links to software, links to additional resources, and project submissions will all be on the cuLearn course page. Additional external tools may be used at consensus of the class. Many resources may be posted on cuLearn, but you will not be expected to know all of the content from every resource. Most resources will be there for your interest unless otherwise specified.

Objectives: The goal of this course is to gain practical game design and development experience using modern project management techniques and industry standard tools. By the end of this course, you should have realized a completed, playable, and polished game and have an understanding of how agile project management methods work in practice during a short game development life cycle.

Prerequisites: COMP 2401, COMP 2402, and COMP 2404. From these courses, you are expected to have some proficiency writing code in C-like languages, basic software planning, as well as selecting and applying data structures. You are expected to have some experience with games or be able to get some experience with games.
Topics Covered: The first few weeks of the course will focus on teaching very basic concepts of game design, game analysis, creativity, agile methods in software development, and the rapid prototyping of games. After this, much of the course will focus on how agile methods are applied to game development.

Grading: In this course, you will be submitting a prototype as an individual and writing a midterm about agile practices in game development. The course consists of regular meetings with formal practices which must be followed for full marks in meeting participation. Teaching assistants will provide playtests, each of which will be assessed based on the goals set out in the weeks prior. Peer evaluations may be used to adjust project grade for individuals. Dates presented in this outline are subject to change based on student input during the course. Number of demonstrations and meetings may increase or decrease, but the category’s total weighting will remain the same.

<table>
<thead>
<tr>
<th>Component</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Prototype (Due May 12)</td>
<td>5%</td>
</tr>
<tr>
<td>Midterm (In class, June 9)</td>
<td>15%</td>
</tr>
<tr>
<td>Meeting Contributions (5 meetings)</td>
<td>5%</td>
</tr>
<tr>
<td>Project Demonstrations (4 demos)</td>
<td>15%</td>
</tr>
<tr>
<td>Term Project</td>
<td>60%</td>
</tr>
</tbody>
</table>

Project Breakdown:
- Project Proposal (Group, Due May 17) .......... 10%
- Project (Group, Due August 13) .................. 40%
- Project Report (Individual, Due August 13) .... 10%

Collaboration Policy: For individual assignments, no collaboration with other students is allowed. For the course project, students will be working together as a single group and are expected to divide the work equally and fairly.

Undergraduate Academic Advisor: The Undergraduate Advisor for the School of Computer Science is available in by telephone at 520-2600, ext. 4364 or by email at undergraduate_advisor@scs.carleton.ca. The undergraduate advisor can assist with information about prerequisites and preclusions, course substitution-equivalencies, understanding your academic audit and the remaining requirements for graduation. The undergraduate advisor will also refer students to appropriate resources such as the Science Student Success Centre, Learning Support Services and the Writing Tutorial Services.
University Policies

Student Academic Integrity Policy: Every student should be familiar with the Carleton University student academic integrity policy. A student found in violation of academic integrity standards may be awarded penalties which range from a reprimand to receiving a grade of F in the course or even being expelled from the program or University. Some examples of offences are: plagiarism and unauthorized co-operation or collaboration. Information on this policy may be found in the Undergraduate Calendar.

Plagiarism: As defined by Senate, “plagiarism is presenting, whether intentional or not, the ideas, expression of ideas or work of others as one’s own”. Such reported offences will be reviewed by the office of the Dean of Science.

Unauthorized Co-operation or Collaboration: Senate policy states that “to ensure fairness and equity in assessment of term work, students shall not co-operate or collaborate in the completion of an academic assignment, in whole or in part, when the instructor has indicated that the assignment is to be completed on an individual basis”. Please refer to the course outline statement or the instructor concerning this issue.

Academic Accommodations for Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). Requests made within two weeks will be reviewed on a case-by-case basis. After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website (www.carleton.ca/pmc) for the deadline to request accommodations for the formally-scheduled exam (if applicable).

Religious Obligation: Write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details visit the Equity Services website: http://www2.carleton.ca/equity/

Pregnancy Obligation: Write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details visit the Equity Services website: http://www2.carleton.ca/equity/

Medical Certificate: The following is a link to the official medical certificate accepted by Carleton University for the deferral of final examinations or assignments in undergraduate courses. To access the form, please go to http://www.carleton.ca/registrar/forms