

Gameplay in HTML5

Instructor: David M. Anderson <dma36@uw.edu> 425-753-5687

Overview

This course is the first of three in the Game Development for Mobile and the Web certificate program. It covers the techniques required to program a single-player Web game using JavaScript and standard HTML5 features.

Course requirements

Attendance

UW Professional & Continuing Education courses require at least 80% attendance, i. e. eight of the ten classes in this course. Each week there will be an attendance sheet and it is your responsibility to sign it.

Homework

Homework will be assigned in every class but the last, requiring you to apply material from the lectures and readings toward building a game. It will be due by the start of the following class.

You need to complete every homework assignment and receive an average grade of 80%.

Fully completed assignments received on time will be given a grade of 10. Partially complete or functional submissions will be given a lower score based on my judgment of completeness. Late submissions will be marked down by 1 point for each day or fraction thereof past the deadline.

Submit your homework by archiving your files into a .tar.gz, .tgz, or .zip file named using this format: Gameplay_<assignment number>_<YourName>. So if your name is Jane Doe, the archive for assignment #3 would be called Gameplay_3_JaneDoe.tgz. (I don't like spaces in file names.) E-mail the file to me and use the same format for the subject line. (Spaces are acceptable there.)

Course resources on the Internet

This syllabus, lecture materials, homework assignments, solutions, and other resources are available at http://EpsilonDelta.us/UW_GameplayHTML5/ .

Textbooks

Required

Jacob Seidelin, *HTML5 Games: Creating Fun with HTML5, CSS3 and WebGL*, 2012 John Wiley and Sons (ISBN 978-1-119-97508-3)

Stoyan Stefanov, *JavaScript Patterns*, 2010 O'Reilly (ISBN 978-0-596-80675-0)

Recommended

David Geary, *Core HTML5 Canvas: Graphics, Animation, and Game Development*, 2012 Prentice Hall (ISBN 978-0-13-276161-1)

Douglas Crockford, *JavaScript: the Good Parts*, 2008 O'Reilly (ISBN 978-0-596-51774-8)

Sergey Mavrody, *Sergey's HTML5 & CSS3 Quick Reference*, 2012 Belisso Corp. (ISBN 978-1-468-15007-0)

Class schedule

Class	Topics	Readings
#1: 3 Oct 2012	Introductions Technologies for the Web Web development tools	Seidelin, p. 8-19, 26-31 Stefanov, p. 9-23, 57-78
#2: 10 Oct 2012	The application framework Switching screens Web fonts, CSS styling Menu buttons	Seidelin, p. 33-38, 51-56 Stefanov, p. 87-101
#3: 17 Oct 2012	Vectors Random numbers	Geary, p. 54-64
#4: 24 Oct 2012	Graphics with the Canvas	Seidelin, p. 125-132, 136-150, 159-164, 176-178 (Geary, p. 65-299)
#5: 31 Oct 2012	Modeling the game	Seidelin, p. 82-102
#6: 7 Nov 2012	Loading images Displaying the game	Seidelin, p. 166-175, 179-194
#7: 14 Nov 2012	Input Animation	Seidelin, p. 196-199, 204-224, 226-244
#8: 28 Nov 2012	Audio	Seidelin, p. 270-274, 291-298
#9: 5 Dec 2012	Data storage	Seidelin, p. 362-382
#10: 12 Dec 2012	Review and enhancements	