

AUGUST

14

Thursday

CSE 484

GAME DESIGN AND ENGINEERING

4.8.2020

		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		
S	M	T	W	T	F	S

JULY 2014

9 TAUGHT BY

- 10 • Prof. Kavita Vermuri

COURSE TOPICS

1. what is a game?

- games overview

- a theory of fun

- history of games

- history of computer games

2. what are the elements of a game?

In this part, we cover the elements of a game, with emphasis on the four major ones. case studies of games in which one or more of these elements have made the game will be analysed.

- mechanics: rules & procedures of the game

- Story: events that bind the game together

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2 AUGUST

Friday

WK 33 • 227-138

15

• aesthetics: game's look, feel, and sounds

• technology: high technology to materials
(paper, sensors, wood, etc.)

3. principles of game design

• layers of game design

• design issues

• preproduction & documentation

• design trade offs

• poor design

end of this part, the game design document is prepared.

4. who is the player?

• game genre and player

• cutting through the noise from player
(likes, dislikes, ...)

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16

Saturday

228-137 • WK 33

4.8.2020

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4. what is a player's experience?

- measuring player's experience

- cognitive behaviour measurement techniques

understanding and increasing player's experiences during game play is an important test for optimal game design. player's experience are recorded by many techniques. this part will analyze each of the technique, and the value addition of each. some experimental work will be required using tools - like simple EEG, ECG/ BSR and eye tracking.

5. how to design game mechanics?

- decision making

- types of decisions

17. ^{Sunday} flow theory

- special dynamics: feedback loops, emergence and intentionality

6. what's game interface?

- user interface design

2014

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Monday

WK 34 • 230-135

18

• differences between digital and non-digital art

• user interface iteration

7. how to create a game script / story?

• linear & non-linear storytelling

8. building a game with technologies

• analysis of game engines (Unity, XNA)

• AI vs HI in game development

• computer graphics & animation

• physics engine - collision detection

9. testing a game

• solo testing

• critical analysis

• designer testing

• player testing

AUGUST

19

Tuesday

231-134 • WK 34

4.8.2020

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10. marketing the game

9

11. ethics, culture, violence in game and responsibilities.

10

11

TEXTBOOKS

12

1. the art of a game design; schell. (2008)

1

2. challenges for game designers; brathwaite.

2

3. Characteristics of games; elias. (2012)

3

4. game design and development: introduction to the game industry; moore.

4

5. Reference papers on serious games, board games, swarm / biological behaviour, cognition and games, etc.

6