0.7 Survey

0.7.1 Demographic Information and Preferences

What is your gender?

Male/Female

What is your age?

3-99

How many years have you been playing video games?

3-99

Fun games can be educational.

Strongly disagree - Disagree - Agree - Strongly agree

Most fun games are educational.

Strongly disagree - Disagree - Agree - Strongly agree

Games are more fun when they are cooperative (instead of competitive).

Strongly disagree - Disagree - Agree - Strongly agree

Games are more fun when you play by yourself (instead of with others).

Strongly disagree - Disagree - Agree - Strongly agree

Games are more fun when you play online (instead of with others in the same room).

Strongly disagree - Disagree - Agree - Strongly agree

Educational games can be fun.

Strongly disagree - Disagree - Agree - Strongly agree

Most educational games are fun.

Strongly disagree - Disagree - Agree - Strongly agree

Games are more educational when they are cooperative (instead of competitive).

Strongly disagree - Disagree - Agree - Strongly agree

Games are more educational when you play by yourself (instead of with others).

Strongly disagree - Disagree - Agree - Strongly agree

Games are more educational when you play online (instead of with others in the same room).

Strongly disagree - Disagree - Agree - Strongly agree

List some fun games.

Freeform response

List some educational games.

Freeform Response

0.7.2 Game

Navigate to this page and play this game for at least 10 minutes.

Game URL

Estimate the amount of time that you played the game for.

Hrs, Mins, Secs

Enter your score/farthest level from your play session.

Int/Float

0.7.3 Rubric

Low game resource penalty for failure

If the player fails, how many game resources do they lose?

- 1 Game resource penalty is extreme (e.g. restart the game)
- **2** Game resource penalty is large (e.g. 1/3 lives, 10 health points / 100)
- **3** Game resource penalty is moderate
- 4 Game resrouce penalty is small
- 5 Game resource penalty is nonexistent (e.g. unlimited lives)

Low "reset time" for failure (time to return to failure point)

If the player fails, how long is the wait until they restart play?

- 1 Reset time is very long (e.g. reloading level takes a long time)
- 2 Reset time is long (e.g. greater than 10 seconds)
- **3** Reset time is moderate (e.g. up to 10 seconds)
- 4 Reset time is short (e.g. a few seconds)

5 Reset time is very short (e.g. near instant)

Content of Game Encyclopedia

If this game contains an encyclopedia of game content, what kind of content does it contain?

- ${f 1}$ Game contains no encyclopedia or Encyclopedia contains no content
- 2 Encyclopedia contains content only related to game mechanics
- **3** Encyclopedia contains information about game mechanics, and also limited historical/factual information
- 4 Encyclopedia contains content related to game mechanics and historical/factual information
- 5 Encyclopedia contains content related to game mechanics and historical/factual information and outside links or references

Amount of Referential Material

How many game objects or events reference real-life objects or events?

- 1 No game objects or events are references to real-life objects or events
- **2** At least one event or object is a reference to a real-world event or object
- **3** Several non-connected events or objects are references to a real-world event or object
- 4 At least one group of objects or events are references to reallife objects or events

5 Numerous groups of objects or events are references to real-life objects or events

High checkpoint frequency

How often are there in-game checkpoints?

- 1 Zero checkpoints
- **2** Checkpoints are few and far between (e.g. levels are the only places to restart)
- 3 Checkpoints are moderate
- 4 Checkpoints are numerous (e.g. players can restart at the beginning of each puzzle)
- **5** Checkpoints are frequent (e.g. players can restart part of the way through puzzles)

Popularity of Referential Material

Of the objects/events that are in the game, how recognizable/popular are they?

- 1 Existing references are extremely obscure
- 2 Some of the references are popular
- **3** About half of the references are popular
- 4 Many of the references are popular
- 5 Most or all of the references are popular

Freedom of exploration

How much freedom of choice is there in the game, including both game world and choice of lessons?

- 1 Players are placed in a strictly linear world or lesson progression
- 2 Players are allowed just a few large-scale choices in their game world
- **3** Players have the option to make choices about the direction of their progression in the world, but it is largely linear
- 4 Players can choose from many choices within the game world to explore, including lessons
- 5 Players are free to choose the direction they want, both educationally and within the game world; allowed to jump between parallel lessons

Iterative feedback

How much and how often is there feedback regarding progress on the game?

- 1 Game gives no feedback other than high-level progression through the game
- 2 Game gives feedback after each level
- **3** Game gives feedback at various points through a level, after a series of puzzles
- 4 Game gives feedback after each puzzle
- 5 Game constantly gives feedback (e.g. during a puzzle)

Rewards for knowing Referential Material

How much does knowing the real-life objects/events affect the gameplay?

- 1 Knowing the referential material is purely irrelevant; doesn't affect the gameplay at all
- 2 Knowing the referential material is a little useful; only affects the gameplay a small amount
- **3** Knowing the referential material is somewhat useful; moderately affects the player's choices during gameplay
- 4 Knowing the referential material is very useful; usually affects the player's choices
- **5** Knowing the referential material always significantly affects gameplay

Location of Game Encyclopedia

Does this game have an encyclopedia of game content? If so, where?

- 1 Game contains no encyclopedia of game content
- 2 Game information is located online, in a non-central location
- 3 Game has an outside manual (or wiki) of game content
- 4 Game doesn't have an in-game encyclopedia, but points to a central location elsewhere
- 5 Game has an in-game encyclopedia of game content

Unorthodox problem solving

Are problems able to be solved multiple ways, or circumvented entirely?

- 1 There is only one way to solve any given problem, with one given progression that is valid as a solution
- **2** Some problems within the game may be solved more than one way
- **3** Multiple solutions are available for each problem, but players are limited to using one of those solutions
- 4 Players can solve each problem via any solution, so long as they do not circumvent it
- **5** Players can solve a problem any way they like, or even circumvent the problem, and be given full (or bonus) points

Adaptive Difficulty

How many difficulty levels are there in the game, and how is the difficulty changed?

- 1 Game only has one difficulty
- **2** Game has several difficulties, but players can only select difficulty at beginning of game
- **3** Game has several difficulties, and players can change difficulty mid-game
- 4 Game has several difficulties, and prompts the player to increase or decrease the difficulty as needed

5 Game has several difficulties, and automatically adjusts the difficulty of the game as needed

Contextual Tutorials

How often are tutorials offered in the game?

- 1 Tutorials aren't given in the game
- 2 Tutorials are given at the beginning of the game
- 3 Tutorials are given every few levels/sections of the game
- 4 Tutorials are given at the beginning of every level/section
- 5 Tutorials are offered continuously

0.7.4 Feedback

This game was fun.

Strongly disagree - Disagree - Agree - Strongly agree

I had fun playing this game.

Strongly disagree - Disagree - Agree - Strongly agree

This game was educational.

Strongly disagree - Disagree - Agree - Strongly agree

I learned something from playing this game.

Strongly disagree - Disagree - Agree - Strongly agree

What did you learn from playing this game?

Freeform response

Provide some comments and feedback on the game.

Freeform response

Provide some comments and feedback on this survey.

Freeform response

Provide your Mechanical Turk worker ID.

Int

0.7.5 Educational Survey

If the player played one of these games, they are also required to take an educational survey before and after playing the game.

Darfur is Dying

The format of the quiz is 10 multiple choice questions, listed below. The same questions will be used for the pre and post survey, but the order will be randomized, and the multiple choice options will be reordered.

Sources http://www.proprofs.com/quiz-school/story.php? title=what-do-you-know-about-darfur-genocide, http://www.funtrivia.com/playquiz/quiz2560151d4fc10.html

- 1. Darfur is in what region?
- a. Western region of Sudan b. Eastern region of Sudan c. Western region of Chad d. Eastern region of Chad
- 2. Through the genocide in Darfur how many have been estimated of being displaced from their homes?
 - a. 2.7 million b. 3.2 million c. 3.3 million d. 2.5 million
- 3. How many civilians of Darfur have been murdered? a. 450,000 b. 300,000 c. 400,000 d. 370,000
 - 4. What is said to be the main cause of the conflict?
- a. Religion b. Ethnic and tribal c. Power d. Economic differentiation
 - 5. What year did the rebellion begin in Darfur?
 - a. 2003 b. 2002 c. 2004 d. 2005
 - 6. What has been the number one killer to civilians in Darfur
 - a. Disease b. Starvation c. Homicide d. Suicide
 - 7. How is the region in Darfur divided?
- a. 4 federal states b. 3 federal states c. 2 federal states d. 1 federal state
 - 8. What group is referred to as Devils on horseback?
 - a. Sunnis b. Shiite c. Tumoils d. Janjaweed

- 9. What group are mostly Arab militias, supported by the government of Sudan, who conduct vicious attacks largely against non-Arab Darfurians.
 - a. Sunnis b. Shiite c. Tumoils d. Janjaweed
- 10. How many other Darifiran rebel groups are struggling to find unity and a common negotiating position to bring up against the government of Sudan, in spite of recent unity preceding the Libyan peace talks?
 - a. 10 b. 30 c. 20 d. 5

Oregon Trail

The format of the quiz is 10 multiple choice questions, listed below. The same questions will be used for the pre and post survey, but the order will be randomized, and the multiple choice options will be reordered.

Sources http://library.thinkquest.org/J001587/, http://www.quizmoz.com/quizzes/Interesting-Facts-Quizzes/o/Oregon-Trail-Quiz.asp, http://www.quia.com/quiz/462983.html?AP_rand=227719871

- 1. How many miles long was the Oregon Trail? 3000 miles 1000 miles 500 miles 2000 miles 20000 miles
- 2. What is the name of a disease like malaria that the pioneers might catch?

ague pneumonia epilepsy measles

- 3. What year was the Oregon Trail first opened? 1847 1843 1899 1876
- 4. What disease killed more people on the trail than any other?

small pox plague cholera scarlet fever

5. When was the first transcontinental railroad built that eventually ended the Oregon Trail?

1867 1870 1899 1869

6. How many modern states did the travelers travel through when crossing the trail?

68310

- 7. How many people died on the Oregon Trail? 50,000-60,000 20,000-30,000 90,000-100,000 10,000-20,000
- 8. Where did the Oregon Trail begin?

Independence, Mississippi Independence, Missouri Independence, Michigan Independence, Montana Independence, Massachusetts

9. Where did the Oregon Trail end?

Vancouver, Washington The Dalles, Oregon Portland, Oregon Stevenson, Washington Oregon City, Oregon

10. How many people came west on the Oregon Trail? at least 80,000 at least 1,000,000 at least 1,000 at least 1,000

Light Bot

Sources http://www.cs.iastate.edu/~honavar/JavaNotes/Notes/chap16/chap16quiz.html

Functions // code function foo() bar(); print('foo'); function bar() print('bar');

for print('fizz'), write fizz(no quotes) in the text box. for print('fizz') followed later in the program by print('buzz'), write fizzbuzzïn the text box.

questions: 4 pre, 4 post. random permutations of 4 foo or bar function calls strung together.

```
ex:
foo() bar() bar() foo()
or:
bar() bar() bar() bar()
```

Loops using 2 of the following questions for pre and the other 2 for post

4. Examine the following code:
 int count = 0;
 while (count <= 6)
 {
 System.out.print(count + " ");
 count = count + 2;

```
System.out.println();
What does this code print on the monitor?
a. 1 2 3 4 5 6
b. 0 2 4 6 8
c. 0 2 4
d. 0 2 4 6
5. Examine the following code:
    int count = 7;
    while ( count >= 4 )
      System.out.print(count + "");
      count = count - 1;
    System.out.println();
What does this code print on the monitor?
a. 1 2 3 4 5 6 7
b. 7 6 5 4
c. 6 5 4 3
d. 7 6 5 4 3
6. Examine the following code:
    int count = -2;
    while ( count < 3 )
      System.out.print(count + "");
      count = count + 1;
    System.out.println();
What does this code print on the monitor?
a. -2 -1 1 2 3 4
b. -2 -1 1 2 3
c. -3 -4 -5 -6 -7
d. -2 -1 0 1 2
7. Examine the following code:
    int count = 1;
```

```
while ( count < 5 )
    {
        System.out.print( count + " " );
    }
    System.out.println( );
What does this code print on the monitor?
a. 1 2 3 4
b. 1 2 3 4 5
c. 2 3 4
d. 1 1 1 1 1 1 1 1 1 1 . . . .</pre>
```

Conditionals procedural generation

X: for each instance, randomly choose between True or False %%: for each instance, randomly choose between 'and' or 'or' #: for each instance, randomly choose between \'not\' or blank

format:

```
#(#X %% #X) %% #(#X %% #X)
```

for pre and post, generate 4 questions each

Does this conditional evaluate to True or False? (multiple choice)

Number Munchers

8 randomly generated questions for pre and post, $8 \mathrm{th}$ grade math

2 add, 2 sub, 2 div, 2 mult