|  |  |
| --- | --- |
| **Criteria A** | **Criteria B** |
| 1. text based storyline | * back-story * 5 min gameplay |
| 2) interactive | * 4 tasks * user impacts end story * scoring/deaths/points * math functions |
| 3) visually appealing | * ASCII art * ASCII titles * Spaces between question and answer * no horizontal scroll |
| 4) adaptable | * usage of methods * comments |
| 5) user-friendly | * appropriate for ages 10-15 * error-free * ifs/else-ifs/elses |
| 6) shows advanced usage of Java coding skills | * usage of methods * efficient * ifs/else-ifs/elses * loops |

**Criteria A**

Part 1:

* Client name
* What the client wants (precisely)
* Target audience

Par2

* Context on how the program will be used
* 5 W’s
* Specific experiment

Par3

* Stakeholders
* Impact/Importance of research
  + Bevalier
  + People Lab
  + Ted Talk
    - <https://www.ted.com/talks/daphne_bavelier_your_brain_on_video_games/transcript?language=en>
  + Nicholas Carr - The Shallows
    - <https://vialogue.wordpress.com/2013/10/10/the-shallows-notes-review/>

CBC Doc Zone Digital Dummies

* + Steven Johnson - Everything bad is good for you

Inspiration Pieces

* CITE THEM USING FOOTNOTES
* Use pictures
* Relate to project
* Relate to specifications to discuss if the inspiration piece is good or bad

List Specifications (shown above) (FOR CRITERIA A)

· Ted Talk with Daphne Bevalier[1]

o Video Games have many benefits and are not as bad as people think they are

§ “The issue is what happens with these guys that actually indulge into playing video games like five hours per week, 10 hours per week, 15 hours per week. By that statement, their vision should be really bad, right? Guess what? Their vision is really, really good. It's better than those that don't play.”

§ “So clearly playing those action games doesn't lead to attention problems.”

§ “But we design tasks on the computer where we can measure, to millisecond accuracy, how good they are at switching from one task to another. When we do that, we actually find that people that play a lot of action games are really, really good. They switch really fast, very swiftly. They pay a very small cost.”

o Video games and different kinds of video games have different effects on the brain

§ “The first one is that not all media are created equal.”

§ “Different video games have a different effect on your brains. So we actually need to step into the lab and really measure what is the effect of each video game.”

· Ted Talk with Tom Chatfield (7 ways games reward the brain)[2]

o The video game industry is huge an continues to grow in size

§ “From about 10 billion in 1990,it's worth 50 billion dollars globally today, and it shows no sign of slowing down. In four years' time, it's estimated it'll be worth over 80 billion dollars.”

o People spend ludicrous amounts of time, money and effort on games

§ “people spend about eight billion real dollars a year buying virtual items that only exist inside video games.”

§ “a virtual asteroid in it sold for 330,000 real dollars.”

§ “this virtual object takes 200 real people about 56 days of real time to build, plus countless thousands of hours of effort before that. And yet, many of these get built.”

§ “the game Farmville that you may well have heard of, has 70 million players around the world and most of these players are playing it almost every day.”

o The reward schedule is what makes games fun for people

§ “The game's just trying to get people to open about a million boxes, getting better and better stuff in them.”

§ It has to be slightly challenging to achieve the reward quota

· “Now, I could make a game called Piecraft, where all you had to do was get a million pies or a thousand pies. That would be very boring. Fifteen is a pretty optimal number.”

§ People need even little irrelevant rewards to keep them interested

· “And what we do is make sure that every time a box is opened, there's something in it, some little reward that keeps people progressing and engaged.”

§ There’s got to be different “tiers” of rewards and different probabilities of getting them

· “There's going to be a 10 percent chance you get a pretty good item. There's going to be a 0.1 percent chance you get an absolutely awesome item.”

· “And one thing they certainly do at the moment is if you got a 0.1 percent awesome item, they make very sure another one doesn't appear for a certain length of time to keep the value, to keep it special.”

§ Always have a reward (no failure)

· “Every time you do something, you get credit; you get a credit for trying. You don't punish failure. You reward every little bit of effort -- a little bit of gold, a little bit of credit.”

§ Add a level of uncertainty to rewards

· This makes them more interested, since the unknown piques their curiosity

o “what really gets them going is the uncertain reward, the reward pitched at the right level of uncertainty, that they didn't quite know whether they were going to get it or not.”

o Tasks give a reason for people to play this game

§ Make multiple – possibly unrelated – tasks

· “You say, it's about doing 10 of these questions, but another task is turning up to 20 classes on time, but another task is collaborating with other people, another task is showing you're working five times, another task is hitting this particular target.”

· This allows people to have many objectives in parallel and if they find one task hard, they can move onto another

o Make the player’s actions matter; allow them to learn/understand the world they’re in

§ “But if you can model things for people, if you can give things to people that they can manipulate and play with and where the feedback comes, then they can learn a lesson, they can see, they can move on, they can understand.”

· Complex Learning and Skill Transfer with Video Games (Bevalier’s lab)[3]

o Bevalier’s research crew is studying a wide range of effects of video games on the brain

§ “We will extend this research and document in detail which aspects of sensory and motor skills (see Kersten), attention, pattern learning and recognition (see Aslin), working memory, and decision-making processes (see Pouget) are modified by gaming. We will also characterize associated neural changes using human brain imaging (fMRI see RCBI, ERPs see Hillyar and Optical Imaging see Aslin).”

· The Shallows – Nicholas Carr[4]

o Peoples way of thinking has changed with the introduction of technology

§ “Over the last few years I’ve had an uncomfortable sense that someone, or something, has been tinkering with my brain, remapping the neural circuitry, reprogramming the memory.” (Carr 5)

§ *“What if I do all my reading on the web not so much because the way I read has changed, i.e. I’m just seeking convenience, but because the way I THINK has changed? – Scott Karp”* (9)

§ “The computer, I began to sense, was more than just a simple tool that did what you told it to do. It was a machine that, in subtle but unmistakable ways, exerted an influence over you.” (13)

§ “our thoughts can exert a physical influence on, or at least cause a physical reaction in, our brains. We become, neurologically, what we think.” (33)

o The development of technology has made humans more productive overall, but less productive when without technology at hand

§ “The more pieces of information we can “access” and the faster we can distill their gist, the more productive we become as thinkers.” (152)

§ “By freeing us from the struggle of decoding text, the form that writing came to take on a page of parchment or paper enabled us to become deep readers, to turn our attention, and our brain power, to the interpretation of meaning.” (166)

§ “Not only has memory lost its divinity; it’s well on its way to losing its humanness.” (181-182)

· Doc Zone – Are We Digital Dummies?[5]Research Plan (Secondary research)

* What video gamer’s brains are like
  + Effects of gaming
  + Pros/ConsHow game companies manipulate users’ brains with reward systems
* Related lab research
* Sources:

o Productivity Paradox

§ “the more you invest in technology, actually the less productive people are”

§ People become so dependent on technology that they’re not that productive by themselves

o Increase in attentiveness in regards to incoming information

When working with technology near/at hand, the person is more attentive and

[1] **"Your Brain on Video Games." *Daphne Bavelier:*. Web. 22 Oct. 2015.**

[2] **"7 Ways Games Reward the Brain." *Tom Chatfield:*. Web. 22 Oct. 2015.**

[3] **"Research Overview." *Research Overview*. Web. 22 Oct. 2015.**

[4] **"The Shallows | Notes & Review." *Vialogue*. 10 Oct. 2013. Web. 22 Oct. 2015.**

[5] **"Are We Digital Dummies? | Doc Zone." *YouTube*. YouTube. Web. 22 Oct. 2015.** ready for information

**Time Delay Code**

public class delay

{

public static void main (String args[])

{

new delay ();

}

public delay ()

{

System.out.println ("Hello");

try {Thread.sleep (1000);}

catch (InterruptedException ex)

{

}

System.out.println ("there");

}

}