More FAQs, Klax World Model and Functional Specifications

Justin R. Erenkrantz

jerenkra@ics.uci.edu

ICS 52: Introduction to Software Engineering

Wednesday, October 13th, 2004

Important Note (Once Again)

○ *A word to the wise: I will be out-of-town after discussion and will only have sporadic email access. **If I** reply, it'll be delayed.*

○ *Professor Taylor may or may not be helpful.*

○ *Assignment #1 hard-copy here on Monday.*

FAQ #13

- *Q: Can you further clarify 'high-level objectives?' Is 'it'll make us rich' or 'it is addictive for players' in the ballpark?*

- *A: A successful marketing strategy always includes multiple viewpoints as to why the product will be successful.*

FAQ #14

- *Q: How detailed should the executive summary be?*

- *A: The executive overview section isn't intended to be read by a technical person, but by a pointy-haired boss. (Or a professor with an earring and black turtleneck. Just kidding.)*

FAQ #15

- *Q: What perspective should we use?*

- *A: Your perspective should be that you are creating the requirements for the Klax prototype retrospectively. The prototype already exists, but we don't have a requirements document - so we're looking for a requirements specification that goes with the system we already have.*

FAQ #16

- *Q: What outline should I use?*

- *A: You should use the outline given in the current quarter's requirements assignment. The outline for previous quarters (such as used by the example Word doc) isn't correct for this quarter.*

FAQ #17

- *Q: Can I include graphics?*

- *A: If you think it'll help. However, be aware that it is a double-edged sword. If it is a good diagram, it'll greatly aid the reader's understanding. Yet, if it's a bad diagram, it'll just serve to confuse your reader. Therefore, our recommendation is to skip it for this assignment.*

FAQ #18

- *Q: I'm still unclear about environmental assumptions. What do you mean?*

- *A: First off, take a step back and look at what software is required to run the Klax prototype. And, then you can determine if any of those software packages place a set of constraints on the hardware.*

FAQ #19

- *Q: Are we assuming that the prototype of Klax will be deployed identically as the final version?*

- *A: The core architectural style and architecture will remain unchanged. Therefore, you can assume that the final version will be deployed identically to the prototype.*

FAQ #20

- *Q: Why do we not have a newsgroup?*

- *A: We want to ensure that the information you receive is correct. Remember the earlier comment: "The TA is your friend, but your friend is not the TA." This class is about individual effort not team efforts.*

FAQ #3 (once again)

- *Q: What is the World Model?*

- *A: The 'world model' phrase refers to a conceptual view of the game that can adequately describe all aspects of the game. Therefore, any specification in your functional requirement would involve some feature from the 'world model.'*

Some helpful (?) definitions

- *World model: Abstract view of system*
  - *30,000 feet, nothing directly testable*
  - *Serves to introduce the 'players'*
- *Functional spec: Low-level details*
  - *Refers to elements from world model*
  - *Everything must be directly testable*

Dramatis Personae

- *List of characters in a play*

- *Examples from Shakespeare's Henry V*
  - *KING HENRY THE FIFTH*
  - *DUKE OF GLOUCESTER, brother to the King*
  - *DUKE OF BEDFORD,   "   "   "   "*
  - *DUKE OF EXETER, Uncle to the King*
  - *DUKE OF YORK, cousin to the King*

http://www.microsoft.com/games/revenge/img/screenshot_ms_pacman_2.GIF

Ms. Pac Man World Model

- *Ms. Pac Man: Heroine chased by ghosts*

- *Ghosts: Dudes trying to eat Ms. Pac Man*

- *Pebbles: Food for Ms. Pac Man*

- *Big dots: Allows Ms. Pac Man to eat ghosts*

- *Fruits: Random power-ups*

# Ms. Pac Man World Model (cont.)

- *Maze: course and layout*

- *Score: Points player has accrued*

- *High Score: Historical maximum*

- *Lives: How many chances player has left*

Functional Specification

- *4.1. Ms. Pac Man*
  - *4.1.1. ...is yellow.*
  - *4.1.2. ...is round, but her mouth is open.*
  - *4.1.3. ...wears a red bow.*
  - *4.1.4. ...wears lipstick.*
  - *4.1.5. ...is directly controlled by player.*

Functional Specification (cont.)

- *4.2. Big dots*
  - *4.2.1. ...are yellow.*
  - *4.2.2. ...are circular.*
  - *4.2.3. ...are double the size of pebbles*
  - *4.2.4. ...when eaten by Ms. Pac-Man:*
    - *4.2.4.1. ...disappear.*
    - *4.2.4.2. ...allows Ms. Pac-Man to eat ghosts for thirty seconds.*

KLAX!!!
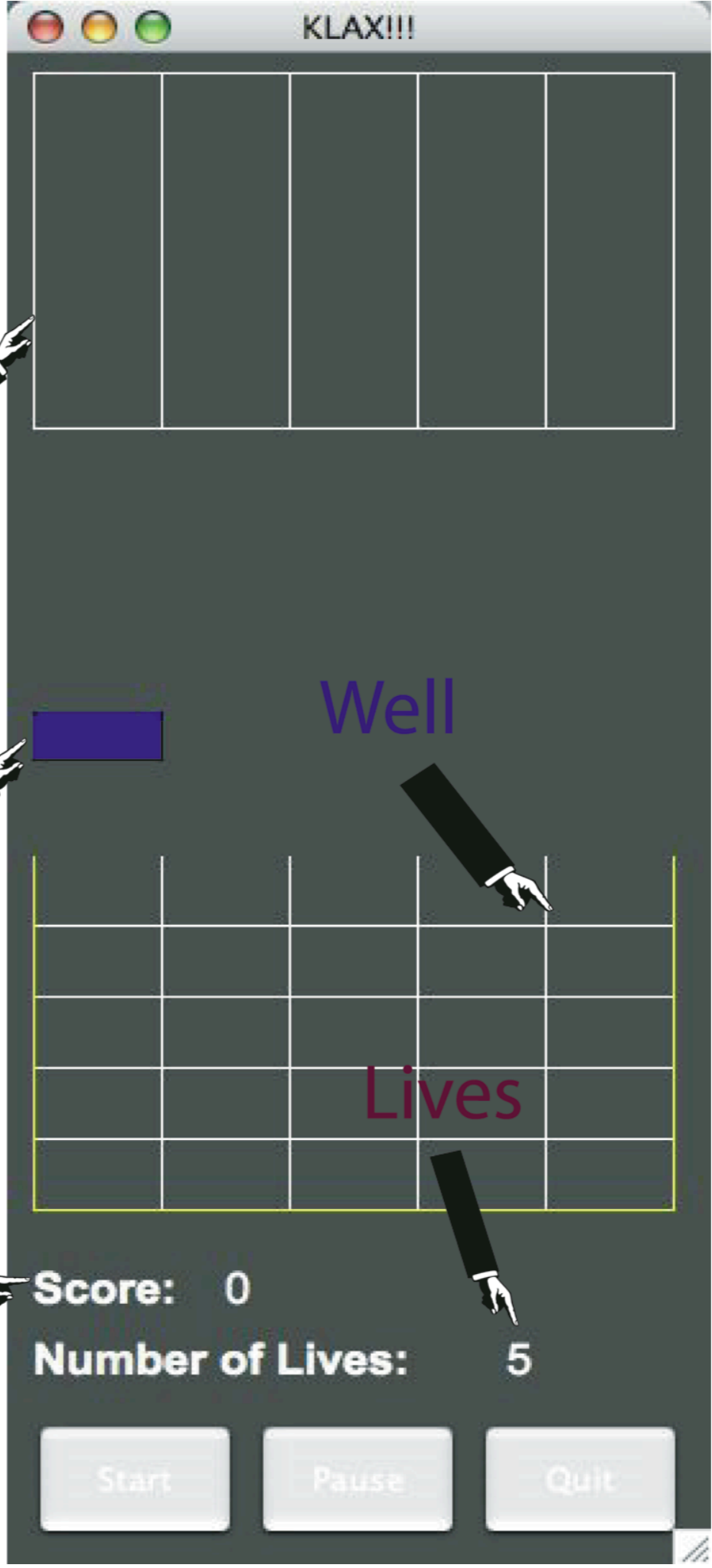
Chute

Well

Palette

Lives

Score

Score: 0

Number of Lives: 5

Start   Pause   Quit