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| LearnMusic! Mr.Berry |
| ICS4U – Written Report |
| By: Hayden Tsui |

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| June 14th 2013  Hayden Tsui |

**Self – Evaluation Justification**

I gave myself a good mark for the self-evaluation because I thought my program was well coded, executed and thought out. This is because my program meets all the requirements and also fulfills all the necessary things that the rubric is based off.   
  
*Program Logic and Design –*

My program had a variety of appropriate control structures. It had the perfect amount of selection tools and loops, making the program very efficient, and also savings the need to write more lines of code. My program also had many objects and classes. My program had objects such as “login”, “lesson”, “quiz”, and “menu”. This allowed my program to be more organized and run more smoothly. The program is also easy to modify quickly because basically all the data is read from a .jpg or .txt in a switch statement. This means that if you were to add more lessons or quizzes you would just need to add a case, and put that name of the .jpg or .txt.

*Program Execution & Usage*-

My program ran successfully and correctly for both normal and special input cases. I made sure to validate all sorts of data to prevent the program from crashing. The program was coded to handle exceptions, and if an error occurred a friendly error message would pop up instead of the program just freezing/crashing. This is why I gave myself a Level 4.

*Program Specifications* –

The program satisfies all assignment specifications completely and correctly. It is an educational program that can be used as a study aid for students. The students are taught different concepts and are given lots of opportunities to reinforce new skills and concepts. It is programmed in java and has a good graphical user interface.

*Coding Style* –

The coding of my program is consistent, and has logical organisation of code structure. It also has proper indentation making the code easy to read.

*Documentation –*

All of my code had a detailed program header with a title purpose and course code. The program also consisted of thorough, accurate comments and was used consistently throughout.

*Creativity –*

The program had a very nice interface. It had proper colours, and looked aesthetically pleasing. It was also interactive, and had highly complex concepts and languages that were used correctly.

**Steps of the process used to complete the project**

1. Learned about assignment, found out about due dates
2. Brainstormed a couple of ideas
3. Came up with an good solid idea (teach users about music) for my project
4. Started making rough outlines on how my program is going to work and run
5. Researched about the idea
6. Got a general understanding on how to use jFrame
7. Played around and got a feel of JFrame
8. Understood and learned how to use jFrame
9. Began working on skeleton code
10. Learned about next functions that I was unfamiliar with in jFrame
11. Handed in my proposal
12. Watch youtube videos to get a better understanding of jFrame
13. Worked on program, and fixed the problem of my program not running on the school computer
14. Finished log in and menu portion of menu
15. Researched about my topic and planned out my lessons and quizzes
16. Learned how to implement sound into Java
17. Made my lessons from photoshop and made my questions with answers for the quiz
18. Implemented the lessons and quizzes onto my program
19. Also implemented the scores/high scores onto my program
20. Debugged program, and fixed errors
21. FINISHED!

**Rationale**

The reason why I undertook the project in this way is because I thought it was the most efficient way for me, and also it was the best way to get things done fast, productive and effective. Since I was not familiar with using jFrame, I was dedicated to learning it as soon as possible. This is because the faster that I learn jFrame, the faster I can actually start coding and implementing my features onto the program. Also the steps that I used to complete the project were logical and efficient because I started coding when I figured out a concrete idea of what I am going to do. By having a concrete idea I am able to set goals for myself which enables me to finish my program effectively and efficiently.

**Anything you would do the same or differently – explain why**

Overall I thought the steps that I used to complete this project was good. That is the thing I would do the same. However, one huge problem when doing this project was time. I had lot of tests and summatives during the past two months. It was very hard to find time to do this project mainly because there were so many components to this project such as software planning, proposal, presentation, learning jFrame, making lessons. So because of this, one thing I would change is my time management skills. I feel like if I had used my time effectively and had a good plan of what needs to be done, I wouldn’t have to stress much about finishing this project and actually have time leftover. Other than that, everything that I had done in this project would be done the same next time.

**Beta Test**

*Beta Test #1 :*

Name : Johnmark Cameron

I thought the program looked really nice. It had a professional and elegant log in screen, with a good menu. I also really like the feature in the lesson where you hover over the notes and it plays the notes. It was really cool. The quiz, and also the part where it displays your score and high score was also very well done. Overall it was a good program! 10/10

Name : Matthew Ma

The program was really good. I especially liked the lesson because it was very interactive. The cool part was when it played music. I also did not find any bugs in the program or glitches so that was really good. Overall the program is fairly well done, and looks professional.

Name : Keshav Pathak

The program is amazing. Wow. The log in screen was fairly simple but looked really nice. The lessons and quizzes were also really cool and interactive. I think the best part was the lesson since it looked nice and had a feature where u could play the specific music notes. I tried to find errors in the program and to crash it too, but I couldn’t so good job on that! Overall it is a great program, and nothing needs to be changed.