

Screen design

Design a screen or screens that you think would be suitable for the “Report Card” (or other) program.

Keep in mind the information that needs to be displayed on the screen(s).

o Use Photoshop, Paint, etc to design the screen(s), and then use PrintScreen to capture your final version of the screen. Copy the screenshot into your word-processed report.

Report Card Pro

Search for Student

v1.0.0 made by Tristan, Jagger, Jett

Report Card Pro

Search for Student

harold, gunderson
hardy, damien

v1.0.0 made by Tristan, Jagger, Jett

Report Card Pro

math	96.0
english	94.0
science	92.0
history	90.0

Save Changes

o Indicate the type of Swing component needed for each item displayed on the screen(s).

Appropriate screen messages

JFrame, JPanel, JLabel, JTextField, etc.

o Determine the messages that would appear on the screen(s) during different stages of the “Report Card” (or other) program.

Display the marks, display the grades, save changes button, search for the student, report card pro header, and search input.

Relevant data to display

o What is the important data that needs to be displayed on the screen(s)?

Students, New Student Button, Remove Student Button, Grades, Courses, Save Changes Button

Algorithms (customize as needed for alternate programs)

o How will the student's information be stored in an external file to the program and internal to the program?

The student's information will be stored in a JSON file

o How will student information be added to the external file?

The JSON data will be read and then stored in a cache. The user will be added to the cache, then the cache JSON data will be exported back into the file.

o How will student information be removed from the external file?

The JSON data will be read and then stored in a cache. The user will be removed from the cache, then the cache JSON data will be exported back into the file.

o What variables will be needed in this program?

UI variables and classes, components variables and classes, students map

o What are the global variables? Local variables?

Global: Component Manager, Cache, UI Frame

Local: Student name, id, courses, etc.

Methods: functions and/or procedures

o What functions need to be created for this program?

UI functions, read/write to JSON file,

o What events need to be considered?

Button Clicks, Input changes, page changes, etc.

o Will the user need a manual to use this program?

No. Because it's so easy to use.

o Will the programmer use internal comments in the program?

Yes. To describe the functions.