Individual Activity – Refine and refactor your architecture and design

Lynn Robert Carter, PhD

2019-02-27

Activity Kind

Individual activity

Purpose

The purpose of this activity is to leverage the peer review and group discussions in order to improve the architecture and design for the calculator.

Pre-requisite

Students are expected to have participated in:

- Small Group Activity - Risk assessment for the third and fourth week submissions

- Small Group Activity - Small Group Peer Review of the design

- Small Group Activity - Discuss the implementation surfacing issues and insights

- Group Activity - Discuss the implementation surfacing issues and insights

Tasking

By this point in the project, you should have rather solid ideas about how the solution is supposed to work and the flow from the requirements to the code. The major issue now is to make the flow as smooth as possible and as easy for an average programmer to follow and implement well.

You are expected to have produced a nice collection of documents using UML where appropriate by the end of the week that clearly shows the flow from requirements to high level design to a set of scenarios (user stories) to use cases (supported by detailed design UML diagrams) to nicely documented code. From the previous activities, you should have a rather clear idea about which of the documents and diagrams you have produced are ready or nearly ready for use by others, and which still need work. Start by noting in your ENB which items need improvement and a concise statement of what that improvement must be.

Then, working from the requirements, through the architecture, through the design, and to the code, refine the documentation and make more explicit what the architecture and the design should be and provide explanatory text making it clear to others of lesser experience, the details of the what and why. Engage with others to test out your wording to see if these words make your intent clear to others.

If you have time, start refining your code to align with your external documentation and refine the internal documentation so it all flows smoothly.

Deliverable

Students are responsible for producing and posting their notes, documents, and code in their ENB as evidence that they performed this task as required.

Submission

Each student must produce and submit your ENB for the day.