

Team reviewed: Iron

Reviewer name: Matthew Palmer

Does the design model (all diagrams) use the correct syntax? List what you think is wrong and suggest how to improve things.

The design model exhibits several syntax issues across different diagram types that should be addressed for better clarity and correctness:

In the Activity Diagram, Display license invalid should have a final node as that does not continue on.

The Class Diagrams show inconsistency in multiplicity. For example Stage to Race shows a 1..* -> 1 multiplicity on the domain model, but a 1 -> * multiplicity on the system class model.

Does the design model use the correct level of abstraction? If so, why? If not, where do you think the group could improve their design?

The design model generally uses the correct level of abstraction. The domain class model does capture the essential entities like Race, Racer and Stage. Use cases appropriately represent high-level system functions and activity flows clearly show key decision points.

Are the diagrams consistent and form one design model?

The diagrams are relatively consistent between models. The core roles (Racer, Organizer) are consistently represented throughout the diagrams. Use case relationships align well with sequence flows allowing you to trace easily.

The login sequence diagram has an invalid credentials response but the communication diagram for logging in does not have this present. I would add this to the CD to keep consistency across the models.

In your UI you have a modal pop up saying the racer must have a license for the official race, but you don't have this check in the register sequence diagram. I think this is a good check and would add it to the diagram.

Does the design model (all diagrams together) fulfill the requirements from what was required for Deliverable 1/3? What requirements might be missing or wrong?

Other than some consistency updates all the diagrams together fulfill the requirements for deliverable 1-3.

Based on the above, make suggestions on how to improve the overall design.

I think the sequence diagrams could have more information and returns. I understand there are definition notes that explain the reasoning why the diagrams are simplistic in nature but I don't believe it can accurately capture all possibilities to only have a successful statement in the diagram. In the provide review sequence we only have feedback being recorded and received. This wouldn't capture invalid ways a message could be passed. This could include things like trying to submit without a rating, without a comment, too long of a comment, etc.

For the search for a race sequence diagram the note says it will only show registrations that the racer can sign up for. Most searches don't have this default. Think of how when you are searching for classes to sign up for next semester. By default it will show you everything and you need to filter out classes with no available seats. I think a good improvement would be to show races that may not have seats left in the search and have filter checks in the diagram.

I would also suggest the above consistency changes within the diagrams to make the whole project flow a bit more.

Does the Deliverable document contain all the information needed (based on the kickoff document)?

Yes the deliverable document contains all the information needed based on the kickoff document. I don't notice anything missing.

Your opinion about the design:

Overall the design is very well made. I do have differences of opinion on the setup of some of the sequences. I don't think it is an accurate representation of a sequence to have a note that just says "we assume everything is correct if they made it to this point" as that is leaving out a lot of other potential issues a user may face. This could lead to very unclear/generic error responses shown to the user that would be better handled in other ways.

Did you see anything in the design that might be valuable for your own team's design?

I appreciate the decision to add the Organizer to the sequence diagram since they most likely would get notified that feedback was given on their race. They should be on the diagram and my team had not thought of that.

Personas are well structured and I appreciate using known people in those categories (racer as Ricky Bobby and organizer as Ted Lasso) as the whole bio makes more sense when you know who the person is rather than making up a random actor.