Pranay Sharma

WebSystems Development

Dr. Callahan

Quiz 1 Questions

10/22/2024

1.1 Explain **in detail** (at least one paragraph of at least 5 sentences) what is meant by a Universal Interface in a REST API. (7 points)

**A Universal Interface, for a REST API, is the standardized and predictable approach to using resources on the web. It highlights the same set of generic rules which are universal to all client/server relationships regardless of the specifics of the system. This is typically achieved in REST APIs with standard HTTP operations like GET, POST, PUT, DELETE, and PATCH to manipulate the resources, which typically comes in forms such as JSON or XML. The Universal Interface ensures that the API performs predictable actions such as fetching data (GET), sending data (POST), updating data (PUT/PATCH), or deleting data (DELETE). This standardization allows different clients (e.g., browsers, mobile apps, servers) to interact with the API without having to learn specific custom or system-wide protocols. Therefore, the developer is free to develop scalable and reusable services and make the client-server interactions as simple as possible**

1.2 Explain **in detail** (at least one paragraph of at least 5 sentences) the three primary roles of Scrum and what each’s responsibilities are. Which role(s) are you, and why? Which role(s) am I (and the TAs) and why? (8 points)

**The Product Owner, Scrum Master and Development Team are the three major teams in Scrum. Product Owners work on the product vision, product backlog and guiding team activities toward highest priority tasks that most add value to the project. They serve as the stakeholders and make decisions about product direction. The Scrum Master acts as a guide and mentor for the team to ensure that Scrum practices are adhered to and eliminate barriers that could hinder the team’s efforts. They don’t run the team but are there to help the team set up and optimize itself. Then there is the Development Team who do the work (you can think of this as someone that builds shippable pieces of the product each sprint). The team is cross-functional, which means its members are equipped with all skills required to finish the job without outsourcing. I would be in the Development Team in this case because I’m doing the work and delivering deliverables (tasks or projects). You, Dr. Callahan and the TAs are probably Product Owners and Scrum Masters. You can be Product Owners, determining the overall direction of the course and making sure we are hitting the right goals, helping prioritize work. The TAs can also act as Scrum Master, helping with questions, addressing challenges and making sure we are following the course outline and helping us along the way.**

1.3 What command would you use to change the ownership of a file or directory on a Unix machine (such as your Azure VM)? Show me a complete command invocation to make a directory named /var/www/html be owned by a user named callab5 and a group also named callab5. (5 points)

**sudo chown callab5:callab5 /var/www/html**

**Extra Credit (+5 points)**

1. What student guide to RPI was written in the mid 1980s and archived on GitHub? (Must provide name of guide and GitHub URL to get credit!)

**The student guide is "Not the Rensselaer Handbook (NtRH)" by Steve Staton, Tom White and others in the mid-1980s. It was intended to be a kind of guide for students at RPI that has been archived on GitHub. This guidebook contains tips and advice for students to have a laughable, practical RPI experience.**

**Here’s the archived copy of the guide from GitHub:**

**GitHub URL:** [**https://github.com/DrBarnack/ntrh**](https://github.com/DrBarnack/ntrh)