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)

Universal Interface simplifies and decouples, which allows each part of the API to change on its own. Through specific HTTP requests, only a specific endpoint of the API is exposed to you, so that you get the information that you requested instead of the entire database. Another component of Universal Interface is self-descriptive messages, where all the data that is needed is included in the HTTP headers. Hypermedia as the Engine of Application State means that you use Hyperlinks to decouple the client from the URI structure. Lastly, Manipulation of Resources Through Representations means that each resource contains enough information to modify or delete the resource on the API server. Another feature is discoverability, where for each request, the client learns about the API through connecting to it and using the HTTP response headers that you get back.

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 three primary roles of Scrum are Scrum Master, Product Owner and Developers. The Scrum Master leads the team through Agile Development techniques, where they facilitate the Scrum framework, coach team members on Scum Principles, protect the team from distractions and manage information from team members. The Product Owner manages the product backlog, creates product vision, guides development, as well as communicates with outside people such as intaking customer feedback and collaboration with stakeholders. Developers are the people in Scrum that create the product and follow the product backlog. Each developer does not need to have a concrete role but work together to complete the project. In class, I am a developer and Dr. Callhan, and the TAs are both the Scrum Master and Product Owners. This is because as team 12, we are only in charge of creating the product which are the roles of the developers, while Dr. Callahan and the TAs oversee making sure that everything in the Scrum process goes smoothly, helping remove obstacles that may come in the way and instill Scrum techniques.

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