Kevin Shields

5/26/22

ELEC3225 Professor Rawlins

Leopard Web Assignment 2 – Process Models

**Integration & Configuration Model**

**Block diagram:**

Text

Description automatically generated

**Requirement Specification:**

Goal: This program is modeled after a Leopard Web type service. Students, instructors, and admins will be able to perform operations to create and manipulate course schedules over not just one, but several semesters. This program will utilize object-oriented programming to create a hierarchy of classes and objects, as well as databases to store and access data. This program will also implement a simple and easy to use UI (User interface) as its front end for ease of use.

**Component Analysis:**

This step involves evaluation of current solutions on the market that might be applicable to our system. In the case of the Leopard Web system, we can look at potentially outsourcing for database and user interface solutions, since the class hierarchy is a fairly custom component, that does not necessarily need to be outsourced.

Database solutions:

Google cloud databases(https://cloud.google.com/products/databases): Google provides services for all types of databases no matter what platform you are utilizing. In the case of the Leopard Web, the plan is to use SQL, which google offers.

User Interface solutions(<https://www.angleritech.com/services/design-services/user-interface-development/>): Anglertech offers pleasant graphical user interface solutions for any application. They are known for really nailing the branding of the product and enhancing the user experience.

**Requirement modification:**

This step is for modifying the original requirements of the system to fit the mold of the new components. In this case, we do not necessarily need this step because the components that we are outsourcing because there is a lot of customizability offered, especially with he Anglertech User interface solution. With both of these solutions we should be able to work with the companies in order to properly integrate the database as well as the user interface in with our class hierarchy

**System design & reuse:**

In this step, we take a step back and redesign the system as needed to adhere to any new specifications required by the new components. In this case, since we have a small number of components working together the transition should be smooth.

**Development & integration:**

This is the step where you do the final revisions of any code needed before you integrate all of the components into the central system. Making sure the class hierarchy code blocks are syntactically correct to interact with the Google database.

**Validation:**

The final step is the same as all of the other models. Final testing of the software to make sure that all of the components are working together correctly. Any issues that are found, if they pertain to the components that we have outsourced can be taken up with the companies so that they can be addressed in an efficient and timely manner.