

# D424 Software Engineering Capstone

## Four-task Process and Resource Guide

### Task 1: Project Approval

**The first step is to [download the approval form](#) and complete it.** Once you've filled it out, send it to your instructor. They'll sign it and return it to you so you can submit it through the course with the waiver as proof that you have Instructor approval.

To qualify for approval, your app must be web-based (or a mobile app) and deploy from the cloud. If it's a mobile app, it can deploy through Google Play. There are no language requirements, so you can code in the language of your choice. You can repurpose your Web-Based App or the Mobile App project for Capstone.

### Task 2: Business Proposal

In Task 2, you'll be describing the following as it pertains to your project:

- The Customer (Who will use this app and why)
- The Business Case (How the app help the customer)
- Fulfillment (How the app will fulfill the business needs of the Customer. Describe the app features, how it will appear, and how outcome is presented)
- Functionality (How the application will interface with other systems, how its functions will be enabled by the user, and what type of results it will provide)
- Deployment (Explain the deployment process, Deliverables, Project Timeline, and Costs and how the code will be validated and verified to be working)

Please use this [Task 2 Template](#). *Students who don't use provided templates tend to need more revisions than those who do.* You can review [this sample paper](#) to see how to approach the task and the level of detail necessary to pass.

### Task 3: The Code

This task is all about the code. First, you'll set up a Gitlab repository. Use [this link](#) to access Gitlab through the WGU SSO. [Here are the instructions](#) for setting up the repository for D424. If you run into any issues with Gitlab, please reach out to your previous Software Instructor. **Also, If you need help with your actual code, please contact your previous Programming Instructor as well.**

Then, you'll push your code to your repository. You're also tasked with providing technical documentation. Please use [this template](#) for your documentation. Here is a [sample of passing student work](#) for Task 3, including information on the unit tests performed and its results. The final requirement of this task is to create a Panopto video to demonstrate the app and its features. You do not have to appear on camera in your video.

### Task 4: Deployment

In Task 4, you'll deploy your code and discuss why you chose your Cloud provider. You'll also describe how you used container images. After that, export your Gitlab code to a compressed file, and make a video demonstrating your deployment process. Please use [this template](#) to complete Task 4.