

Phase 3

Web Application Development

Scenario

Introduction and Deliverables

In this phase, you will build a cloud native, AI-enabled web application. You will deploy the models you developed in Phase 2 using simple Flask applications for online predictions, build a Django application to display your results, and instrument all of these using open source tools. This pattern of separate, containerized applications gives you and your team development flexibility and allows you to update and scale components individually.

Week	Task	Deliverable
9	Create a Flask application (one per team member) to respond to HTTP requests with prediction results	3 Flask apps
10	Create a Django web application	Django App
11	Containerize your applications	5 Container Images
12	Instrument your applications using Prometheus and visualize with Grafana	Grafana Dashboard
13	Deploy your web application in LTAC	Deployed Application
14	Web user interface development	Landing Page
15	Flex week: Catch up, or add a new feature to Django application	Django Application
16	Flex week: Catch up, or add a React.js component to your web page	React Component

Table 3.1: Deliverables in Phase III. Progress review weeks are highlighted.