Lewis Instructional Architecture — Reference Implementation Tutorial

Requirement 3: Create a tutorial that can recreate Requirement 2 in less than 15 minutes by:

Deploying "Lions, Tigers & Bears — Oh My!" React App with CI/CD + Custom Domain

Overview

This tutorial walks you through how to:

- Build and deploy a React-based reference implementation (**Lions, Tigers & Bears Oh My!** — based on the Brad Schiff Dogs API exercise)
- Use **Azure Static Web Apps + GitHub Actions CI/CD**
- Add a **custom domain through GoDaddy**

Prerequisites

Before starting:

Requirement
Node.js Installed (v18+)
Git + GitHub account
Azure Student Subscription
Purchased domain from GoDaddy

Step 1 — Clone the Template Repository

1. Go to the provided GitHub template repository (example):
   `https://github.com/sairamreddy1/Lions-and-Tigers-and-Bears.git`
2. Click:

Use this template → Create a new repository

3. Clone locally:

git clone https://github.com/sairamreddy1/Lions-and-Tigers-and-Bears.git
cd lions-tigers-bears
npm install
npm start

Step 2 — Build the Project (React App)

This application:

- Displays rotating images of Dogs
- Uses a public API (Dog API) with fetch, async/await, Promises
- Uses reusable components and simple architecture

Build for production:

```
npm run build
```

This creates a `/build` folder ready for deployment.

Step 3 — Deploy to Azure Static Web Apps

1. Go to Azure Portal https://portal.azure.com
2. Click:

Create resource → Static Web App

3. Fill Required Fields:

Field	Value
Name	dog-slideshow
Region	global
Deployment source	GitHub

4. Authorize GitHub if prompted.
5. Select:

Setting	Value
Repository	https://github.com/sairamreddy1/Lions-and-Tigers-and-Bears.git
Branch	main
Build Preset	**React**
App location	/
Output location	build

6. Click **Create**

Azure automatically configures **GitHub Actions CI/CD**.

Step 4 — Automatic Deployment Verification

After 2–4 minutes, GitHub Actions finishes and Azure deploys the site.

Your temporary URL will look like:

`delightful-desert-0ef3a461e.3.azurestaticapps.net`

If you push new code to GitHub:

CI/CD runs
Azure redeploys automatically

Git link:-

https://github.com/sairamreddy1/Lions-and-Tigers-and-Bears.git

Azure link:-

delightful-desert-0ef3a461e.3.azurestaticapps.net