

SE Deployment Workshop: *Extreme Startup*

17-313 Spring 2025

Foundations of Software Engineering

<https://cmu-313.github.io>

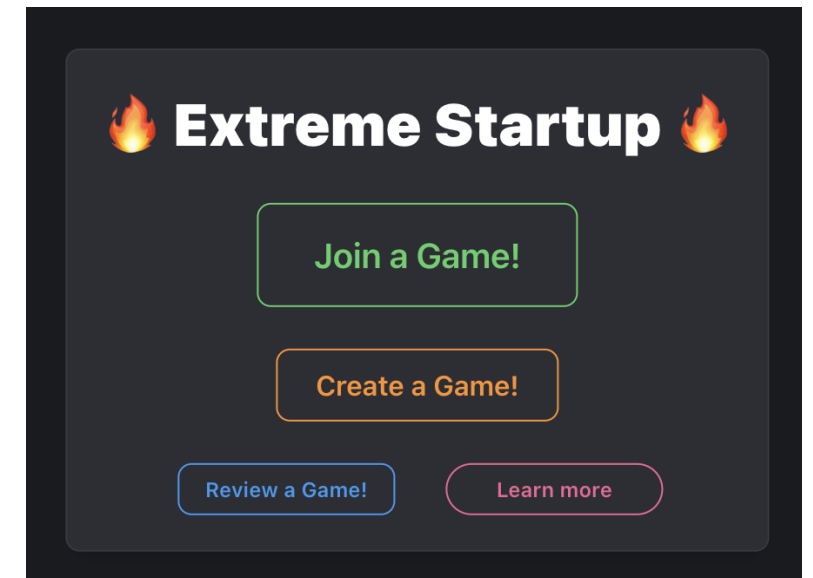
Michael Hilton, Austin Henley, and Nadia Nahar

Learning Goals

- Get familiar with continuous deployment
- Deal with fast-changing requirements based on user demand, which scales with success rate / user base
- Understand the value of in-house testing before deploying to production
- Differentiate between missing features and wrong behavior in a production system

Extreme Startup Game

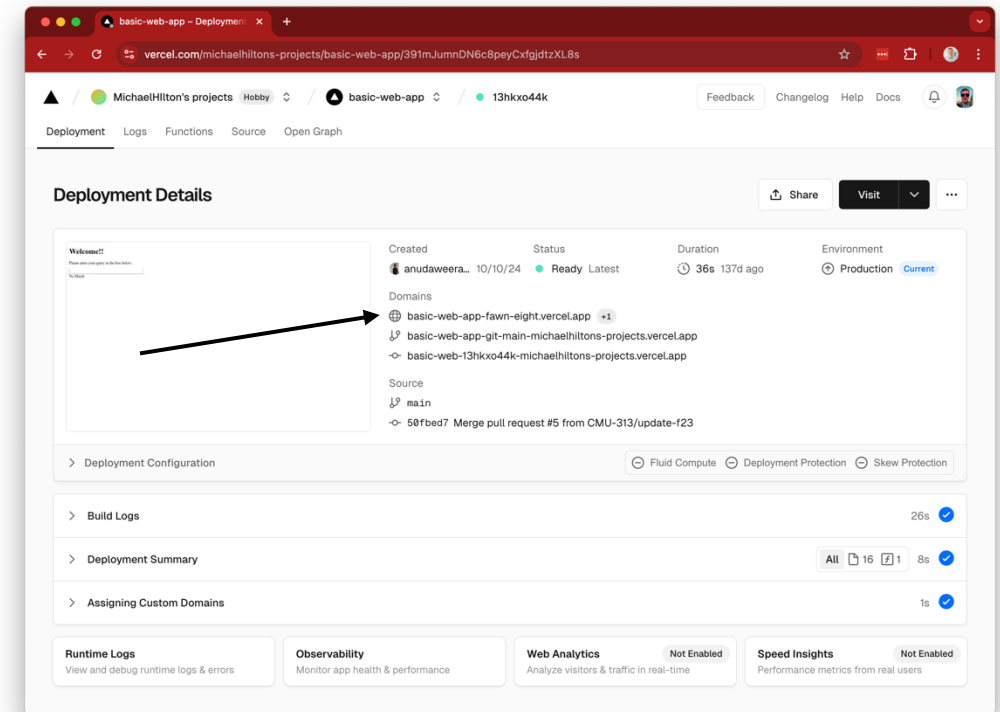
- Maintained by Robert Chatley, Matt Wynne, and Mike Sorokin (Imperial College London)
- Goal is to help students take rapid deployment to the extreme
- We will play the game, then discuss as a group



Setup Instructions:

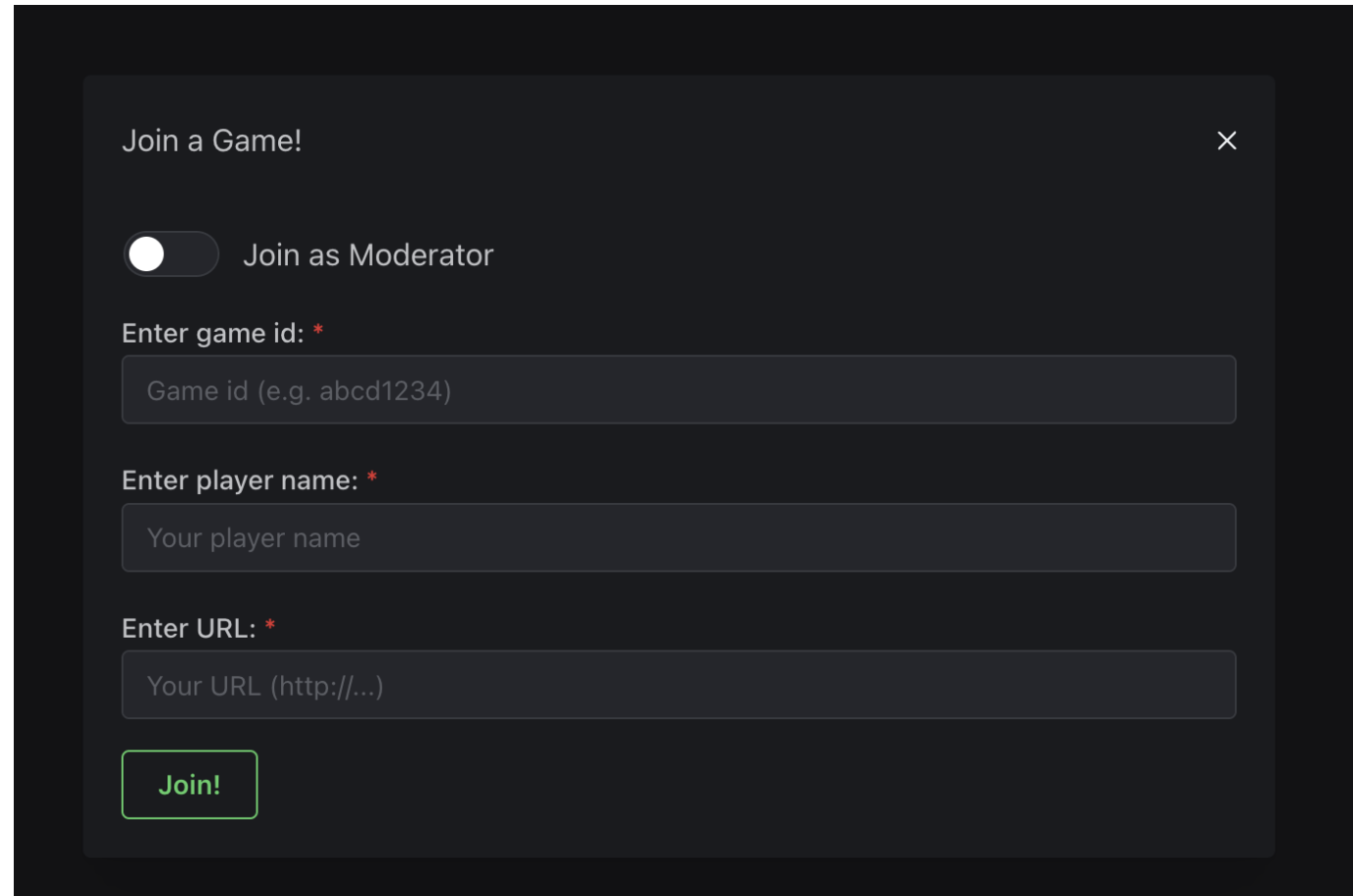
Step 1: have vercel app running

- If you have not done the recitation, you will need to do this first. (See course website)
- Visit your vercel deployment. Find the URL for your deployment



Step 2: Join game

- Game id: from board
- Player Name:
 - Remember what you put in
- URL:
 - IMPORTANT: PASTE YOUR URL BUT ADD '/API'
 - E.g.
`http://myurl.com/API`



The screenshot shows a dark-themed dialog box titled "Join a Game!" with a close button (X) in the top right corner. Inside the dialog, there is a toggle switch labeled "Join as Moderator" which is currently turned off. Below this, there are three input fields, each with a red asterisk indicating a required field:

- The first input field is labeled "Enter game id: *" and contains the placeholder text "Game id (e.g. abcd1234)".
- The second input field is labeled "Enter player name: *" and contains the placeholder text "Your player name".
- The third input field is labeled "Enter URL: *" and contains the placeholder text "Your URL (http://...)".

At the bottom left of the dialog, there is a green button with the text "Join!" in white.

Extreme Startup

128.2.24.106/7b268e54/players/1948b7c8

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Player: hilton

Player ID

1948b7c8

Game ID

7b268e54

Copy Game Id

API

https://basic-web-app-fawn-eight.vercel.app/api

Score

-100

Events

ID	Query	Points	Timestamp	Outcome
3e751752	What is your name?	-10	01:09:31	INCORRECT
813aaeff	What is your name?	-10	01:09:26	INCORRECT

vercel.com/michaelhiltons-projects/basic-web-app/logs

MichaelHilton's projects Hobby / basic-web-app

Project Deployments Analytics Speed Insights **Logs** Observability Firewall Storage Settings

Filters

- Timeline
 - Past 30 minutes
- Contains Level
 - Error 1
 - Warning 0
- Environment
- Route
- Request Path
- Status Code
- Resource
- Request Type
- Host
- Request Method
- Cache
- Branch
- Deployment

16 total logs found...

Live

Time	Status	Host	Request	Messages
FEB 24 20:09:57.42	GET 200	basic-web-ap...	/api	/api?q=What%20is%20your%20name%3F
FEB 24 20:09:52.17	GET 200	basic-web-ap...	/api	/api?q=What%20is%20your%20name%3F
FEB 24 20:09:46.79	GET 200	basic-web-ap...	/api	/api?q=What%20is%20your%20name%3F
FEB 24 20:09:41.96	GET 200	basic-web-ap...	/api	/api?q=What%20is%20your%20name%3F
FEB 24 20:09:36.93	GET 200	basic-web-ap...	/api	/api?q=What%20is%20your%20name%3F
FEB 24 20:09:31.69	GET 200	basic-web-ap...	/api	/api?q=What%20is%20your%20name%3F
FEB 24 20:09:26.37	GET 200	basic-web-ap...	/api	/api?q=What%20is%20your%20name%3F
FEB 24 20:09:21.22	GET 200	basic-web-ap...	/api	/api?q=What%20is%20your%20name%3F
FEB 24 20:09:16.08	GET 200	basic-web-ap...	/api	/api?q=What%20is%20your%20name%3F
FEB 24 20:09:10.74	GET 200	basic-web-ap...	/api	/api?q=What%20is%20your%20name%3F
FEB 24 20:09:05.41	GET 200	basic-web-ap...	/api	/api?q=What%20is%20your%20name%3F
FEB 24 20:09:00.26	GET 200	basic-web-ap...	/api	/api?q=What%20is%20your%20name%3F
FEB 24 20:08:54.91	GET 200	basic-web-ap...	/api	/api?q=What%20is%20your%20name%3F
FEB 24 20:08:49.57	GET 200	basic-web-ap...	/api	/api?q=What%20is%20your%20name%3F
FEB 24 20:08:43.28	GET 200	basic-web-ap...	/api	/api?q=What%20is%20your%20name%3F
⊗ FEB 24 19:59:28.61	GET 500	basic-web-ap...	/api	4 Node.js process exited with exit status: 1. The

No more logs to show within selected timeline

Takeaways

- Continuous deployment (auto-deploy on push) makes it easy to land changes in production
 - But there is always some delay in the feedback loop after your push
- Not having a feature is better than performing incorrectly
- Requirements can change quickly based on user demand
- User demand scales with success in production
- Local testing can help prevent issues in production, but testing in production might speed things up