Live Building Session 3

Vincent Sider, Malcolm Mason

13 May 2025 | 18:00 – 20:30

AGENDA

- **JOIC** JERSEY OFFICE OF THE INFORMATION COMMISSIONER **https://www.jerseyoic.org**

- **Pairing**

- **Starter pack in cloud**

- **Starter pack on premises**

1- JOIC

2- Pairing

3- Starter Pack in Cloud

Automated Coding Starter Pack for cloud building

80%   **20%**

80% of what you want to build can be automated and will take 20% of your time. AI becomes a development tool.

Start Like a Project Manager 80%

Write a Real PRD

Describe what you're building, why, and with what tools.

Git or Die Trying

AI will break something critical. Use version control.

Your definition of done: unit tests!

We can start the 80% if we have the right scaffolding and security
We can use AI agents for that (Roo)

Lessons Learned after 24 Months of AI coding

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80% 20%

20% of what is remaining will take 80% of your time.

Be laser focused 80%

Ask Before You Fix

Have the model investigate first, then suggest multiple solutions.

Clean Your House Weekly

Delete temp files. Reorganize folder structure.

Lead the Machine. Be secure (more on that in last slide)

You're still the captain. We will switch to aider.chat.

The Automated Coding Starter Pack

GitHub Repository

To be created on the day.

Codespaces

Cloud-based development environment for coding.

Visual Studio Code

Used for editing locally.

Roo Code

VS Code extension that adds AI functionality.

Your Goals Today

🚀 **Create your Open Source Starter Pack**

Based on current SOTA used by advanced Agentic Engineers

🤖 **Set up Git, codespace, roo, sparc**

We will do it together

✓ **Definition of Done**

New GitHub repository with Roo Code set up and requesty

GitHub Setup

Go to github.com

Click the "+" icon in the top right and select "New repository".

Configure Repository

Choose a name and description. Decide if public or private.

Initialize Repository

Add README, .gitignore, and choose a license.

Create Repository

Click "Create repository" button to finish.

GitHub

Reposiory Create

README

README : gitignore a an digenared ✕

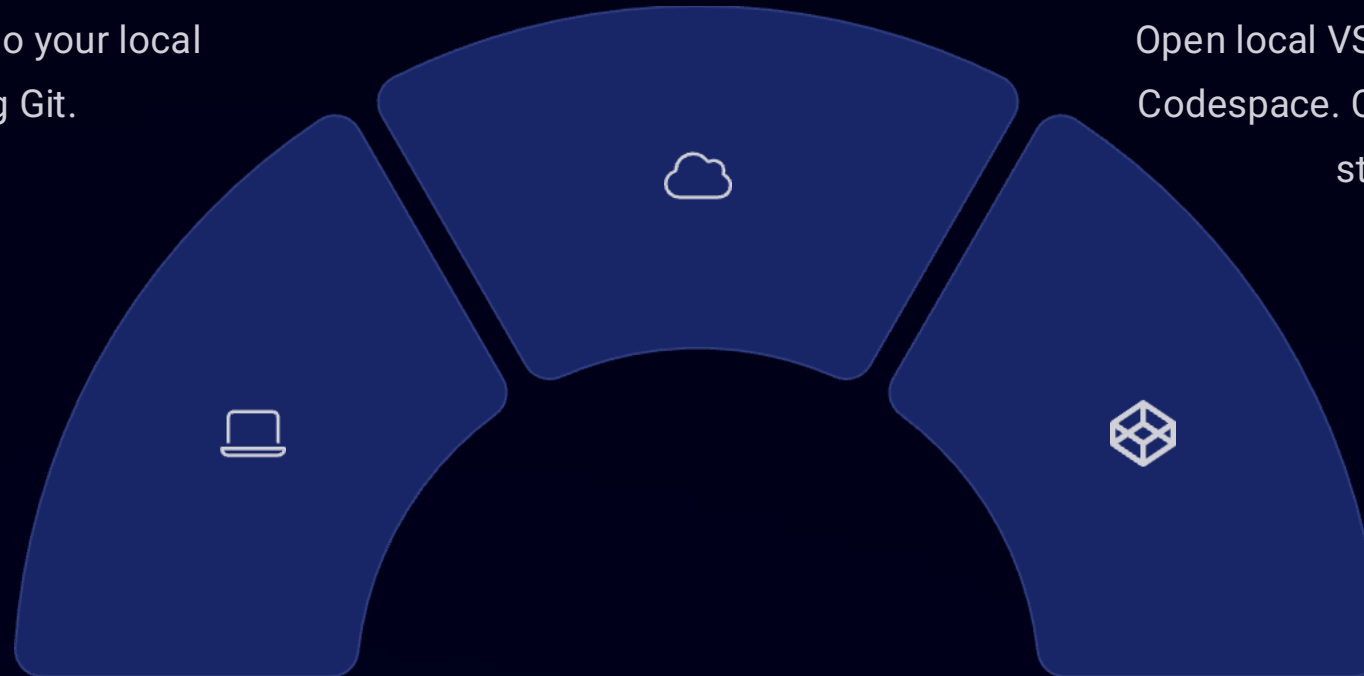Tor. Gitiggnores

License license ✓

Editing Options

Codespaces

Use GitHub Codespaces for an online VS Code IDE environment.

Local Development

Clone the repository to your local machine using Git.

VS Code with Remote Development

Open local VS Code and connect to your Codespace. Can load local model via lm studio or ollama.

Roo - understand modes & subtasks

Architect

Helps with design and architecture of your program.

Ask

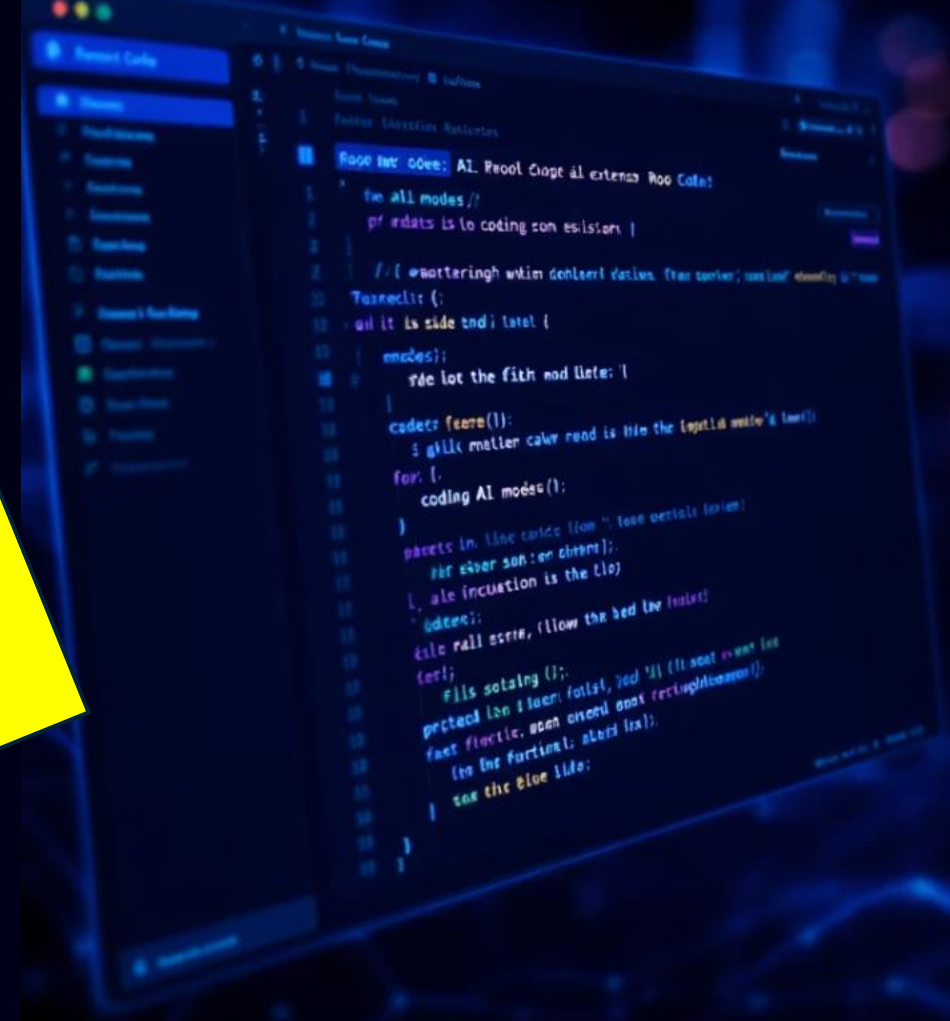Used for asking questions and getting quick information.

Debugger

Assists in identifying and fixing code issues.

Orchestrator

Coordinates **sub- tasks** for autonomous workflows.sb

The orchestrator mode will control the flow and distribute tasks

Install Roo Code from VS Code Extensions (Ctrl+Shift+X or Cmd+Shift+X).

Add the scaffolding and more Modes via Sparc

The SPARC methodology (Specification, Pseudocode, Architecture, Refinement, Completion) **breaks down complex development tasks into manageable phases**, each handled by specialized AI assistants.

This approach ensures:
- **Structured Development**: Clear progression through well-defined phases
- **Modular Architecture**: Code naturally organized into maintainable components
- **Security by Design**: No hard-coded secrets, proper configuration management
- **Comprehensive Testing**: Built-in test-driven development practices
- **Thorough Documentation**: Automatically generated, always up-to-date

npx create-sparc init --force

Security

- Sparc adds a security reviewer mode.

- You can connect requesty to lm studio or ollama

- Be mindful of cheap tools and risky libraries " for example Malicious npm packages posing as dev tools target macOS Cursor IDE users, stealing credentials and modifying files to gain persistent backdoor access. Disguised as developer tools offering "the cheapest Cursor API", these packages steal user credentials, fetch an encrypted payload from threat actor-controlled infrastructure, overwrite Cursor's main.js file, and disable auto-updates to maintain persistence. "

- If possible, write the libraries from scratch or only use vetted libraries compiling the wheels from source (after reviewing the code of course).

What's next ?

- https://drive.google.com/file/d/1cwcerSf3hbaX7Sp5syj4i5V4J9NfnS1r/view?usp=sharing

Transform the output as a PRD document and give to Roo in orchestrator mode

Here is the **Zero-Code User Blueprint for SPARC Program Generation:**

Project Title: (Give your program idea a simple name)

Prepared By: (Your Name)

Date: (Today's Date)

Instructions for You (The Visionary!):

- **No Tech Jargon Needed!** Just describe your idea in plain English. Think about *what* you want the program to do and *why*, not *how* it does it technically.

- **Be Detailed:** The more information and specific examples you give, the better the AI (our team of virtual coding assistants, called SPARC) can understand and build exactly what you want. Imagine you're describing it to someone who needs to build it perfectly without asking you follow-up questions.

- **Focus on the Goal:** What problem does this solve? What process does it make easier?

- **Don't Worry About Code:** SPARC will figure out the best programming languages, databases, and technical stuff based on your description and its own research.

4- Starter Pack on premises

Thank you

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