IIT Kanpur Workshop **Sept. 06, 2025**

Vibe Coding and Software Development Best Practices

Let's create a full stack application using Saarthi and Godspeed

Instructions:

1. First, Install Godspeed from the following link https://godspeed.systems/docs/get-started
2. Then, Install Saarthi in VS Code.
    a. Go to Extensions, Search for Saarthi and click Install.
    b. Restart Extensions
3. To start with backend, we will use Godspeed 4th gen Meta framework to build a micro service with best practices.
    a. In Saarthi, there is a workflows tab, select "Create godspeed project" workflow from the list.
    b. It will ask for project name and will generate project scaffolding in your current workspace.
    c. In the new project, you can find an api endpoint in src/events/helloworld.yaml
    d. Run "*godspeed serve" command* and check the swagger UI at http://localhost:3000/api-docs/ to test this api end point.
    e. Now let's prompt Saarthi to:
    "Modify helloworld api endpoint by splitting name into two fields, firstname and lastname, then return Hello + full name in response."
    Now test the api again to see the changes.
    f. Now, we will add Gemini to our app. Use below prompt

    "*Modify event to accept question field as query and modify function file to implement Gemini sdk using gemini-2.5-flash model. Provide firstname, lastname and question as input and response back the gemini output."*

    g. Test the changes in Swagger.

4. Now it’s time to generate **frontend** based on this backend.
    a. **Create separate folder** for UI generation and open VS Code with newly **created folder as workspace**.
    b. Select prompt to UI generation workflow from workflow dropdown and run.
    c. First, it will create scaffolding and apply necessary tailwind css configs.
    d. Then, it will ask for project goal/description.
    e. Use below prompt
    “Create landing page having header, footer and a simple form in the middle having an input field and submit button.”

    f. Then it will ask for swagger’s spec json file. It has already been automatically generated in the backend generation. We need to copy that file in current workspace and provide the path.
    g. It will generate API slices of redux store in the workspace that will be used in the form along with redux setup with provider.
    h. Then it will finalize all the components and start generating.