# Project Setup and Backtesting Instructions

## Prerequisites

1. System Requirements  
 - Python 3.7 or later  
 - Git installed on your machine  
 - A modern web browser for interacting with the frontend  
 - Internet connection for dependency installation  
  
2. Dependencies  
 - Ensure `pip` is installed and up-to-date.

## Cloning the Repository

1. Open a terminal (or command prompt) on your machine.  
2. Clone the repository using the following command:  
 ```bash  
 git clone https://github.com/CSACHIN77/Sagar\_Backend.git  
 ```  
3. Navigate to the `strategy\_backtest` directory:  
 ```bash  
 cd Sagar\_Backend/time\ based\ strategy/strategy\_backtest  
 ```

## Installing Dependencies

1. Ensure you are in the `strategy\_backtest` directory.  
2. Install the required dependencies using `pip`:  
 ```bash  
 pip install -r requirements.txt  
 ```

## Running the Backtest Components

### Step 1: Start the mapper.py Script

1. In the terminal, execute the following command:  
 ```bash  
 python mapper.py  
 ```  
2. Ensure the script runs without errors and remains active.

### Step 2: Start the server.py Script

1. Open a new terminal window.  
2. Navigate to the `strategy\_backtest` directory again if not already there.  
3. Run the following command:  
 ```bash  
 python server.py  
 ```  
4. Ensure the script runs without errors and remains active.

### Step 3: Ensure strategy\_api.py is Running

1. Verify that `strategy\_api.py` is running in another terminal session.  
 - If not, navigate to the directory containing `strategy\_api.py` and execute:  
 ```bash  
 python strategy\_api.py  
 ```

## Running the Frontend

1. Open your web browser.  
2. Navigate to the frontend interface. This might be served locally or from a specified URL.  
 - If served locally, confirm the port number and visit: `http://127.0.0.1:<port>`  
 - Replace `<port>` with the correct port number used by the frontend application.  
  
3. Use the frontend interface to configure and initiate the backtesting process.

## Notes

- Ensure all components (mapper.py, server.py, and strategy\_api.py) are running concurrently for the system to function correctly.  
- Refer to any project-specific README or additional documentation for advanced configuration and troubleshooting.  
- Logs from the terminal can be useful to diagnose issues during runtime.

## Troubleshooting

- \*\*Issue:\*\* Dependency installation fails.  
 - \*\*Solution:\*\* Verify Python and pip versions and try installing dependencies individually using:  
 ```bash  
 pip install <package\_name>  
 ```  
  
- \*\*Issue:\*\* Scripts fail to start.  
 - \*\*Solution:\*\* Check for missing files or incorrect paths and ensure all scripts are executed from the correct directory.  
  
- \*\*Issue:\*\* Frontend is inaccessible.  
 - \*\*Solution:\*\* Verify the URL or port and ensure no other applications are using the same port.