

# MERN Stack Assignment 3

Que1. What features does Swagger offer?

Ans =>

Swagger is a set of open-source tools built around the Open API Specification that can help us to Design, build, document and consume REST APIs.

Swagger allow us to describe our entire API like:

- Available endpoints(/user) and operations on each endpoints (GET /users, POST /users)
- Operation parameters input and output for each operation.
- Authentication methods.
- Contact information, terms of use and Other Information.

Que2.How does API testing benefit you?

Ans. =>

These are some benefits of API testing:

- **Access to the application without user interface:**  
The major core advantage of API testing is that it provides access to applications without users actually having to interact with a potentially disparate system. This helps the tester to detect and recognize the errors early, instead of them becoming larger issues during GUI testing
- **PROTECTION FROM MALICIOUS CODE AND BREAKAGE:**  
API test requires extraordinary conditions and inputs, which protect the application from malicious code and breakage. Basically, API tests push software to their connective limits. API testing helps remove vulnerabilities.
- **TIME EFFICIENCY VS. FUNCTIONAL AND VALIDATION TESTING:**  
API testing is far less time-consuming than functional and validation testing.
- **COST EFFECTIVE / REDUCES TESTING COST:**  
API test automation requires less code than GUI automated tests thus providing faster test results and better test coverage. The end result of faster testing is a reduction in overall testing costs.
- **TECHNOLOGY INDEPENDENT:**  
In an API test, the data is interchanged using XML or JSON and compromised of HTTP requests and responses. These all are technology independent and used for development. Thus, an API test allows you to select any core language when using automated API testing services for your application.

Que3.How do we include an API in swagger?

Ans=>

First of all we need API built .and then go to swagger Inspector here we need to login or signup after that we make a call to every endpoint, filling in our URL, method (GET/POST/etc.), and any parameters, headers, and authentication details needed for the API. after that we will see or API requests fill into our history to the right of the request pane after we send requests. And if we have more then 20 endpoints (the limit), we recommend creating an API Definition for sets of API calls that are related. We regularly see API Definition that are thousand of lines long – ask yourself what API calls are likely to be used together, and organize accordingly instead of creating a huge file.

Que4.In Swagger UI, how can we submit custom headers with requests?

Ans=>

We can add a header parameter to your request, and Swagger-UI will show it as an editable text box.

Que.5 How Should we use Swagger to produce static docs?

Ans =>

First clone the swagger-codegen project from git and then copy htmlDocs2 folder to another place and modify the .mustache templates in ~/template to fit our requirements and then Run Swagger -codegen generate