

Project Design Phase-I

Solution Architecture

Date	3 November 2023
Team ID	NM2023TMID02112
Project Name	Food Tracking System
Maximum Marks	4 Marks

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

1. Find the best tech solution to solve existing business problems

Here are the steps you can follow to identify and implement the right technology solution:

1. Identify and Define the Business Problem:
2. Gather Stakeholder Input:
3. Conduct a Technology Needs Assessment:
4. Research Potential Solutions:
5. Consider the Following Factors:
6. Evaluate ROI:
7. Prototype and Test:
8. Select the Best Solution:
9. Plan Implementation:
10. Monitor and Measure:
11. Seek Continuous Improvement:
12. Document the Process:

2. Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.

When describing the structure, characteristics, behavior, and other aspects of software to project stakeholders, it's important to provide a comprehensive understanding of the software's features and functionality. Here's a breakdown of how you can communicate these aspects effectively

- 1.Characteristics
- 2.Behavior
- 3.Functionality
- 4.Structure
- 5.User Interface (UI)
- 6.Testing and Quality Assurance
- 7.Security
- 8.Performance
- 9.Maintainance and support
- 10.Compliance and Regulations
- 11.Documentation
- 12.Roadmap

Define features, development phases, and solution requirements

Features, development phases, and solution requirements are important concepts in the context of software and product development. Let's define each of these terms:

1. Features
2. Development Phases
3. Solution Requirements:

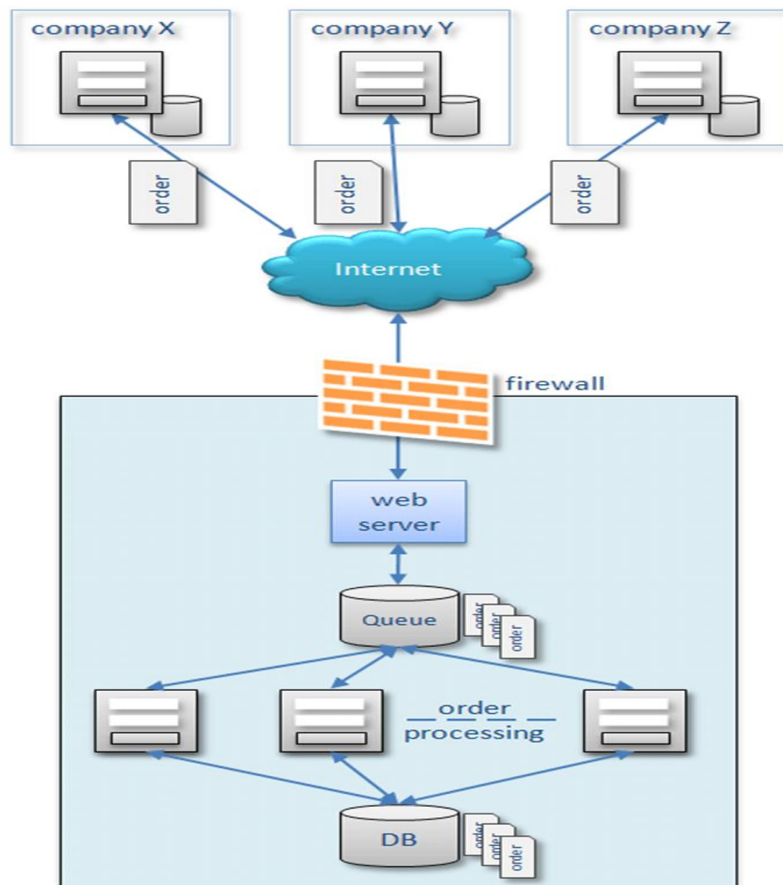
Provide specifications according to which the solution is defined, managed, and delivered

Specifications for defining, managing, and delivering a solution can vary depending on the specific project or context. However, here are some common elements and considerations that can be included in such specifications:

1. Project scope
2. Stakeholder Requirements:
3. Project Timeline:
4. Budget and Resources:
5. Quality Standards:
6. Risk Management:
7. Communication Plan:
8. Project Team:
9. Deliverables:
10. Change Management:

- 11. Compliance and Legal Requirements:
- 12. Monitoring and Reporting:
- 13. Testing and Validation:
- 14. Documentation:
- 15. Closure and Handover:
- 16. Post-Implementation Review:

Example:Solution architecture diagram



Prerequisite

- 1 download node.js : [Node.js](#)
- 2 download vs code: [Li4nk](#)
- 3 download metamask : <https://metamask.io/>

Steps to complete the project

Step 1:-

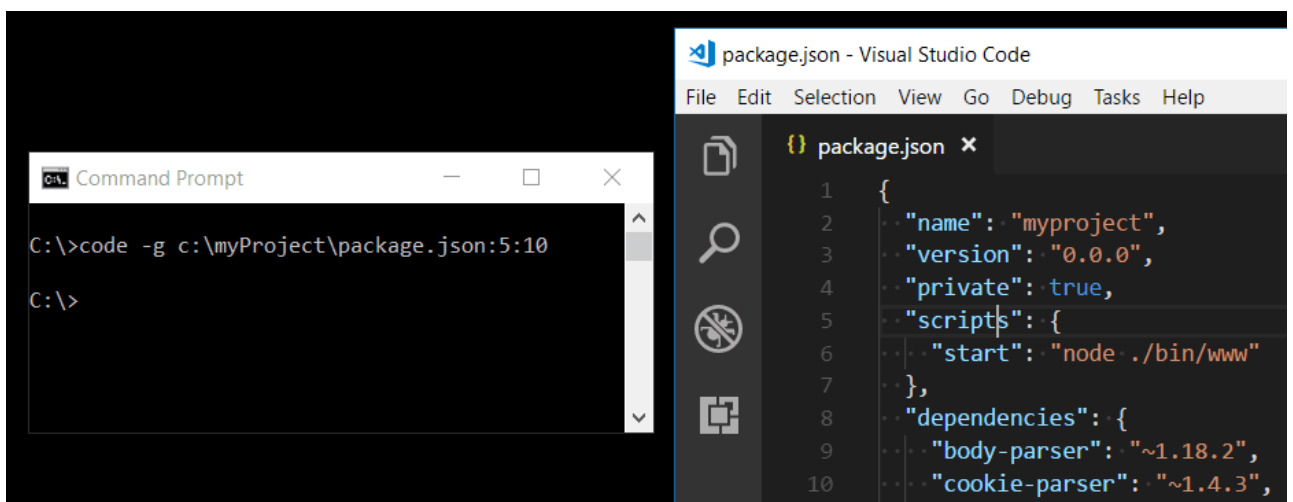
- 1. Open the Zip file and download the zip

file..Extract all zip files



Step 2 :

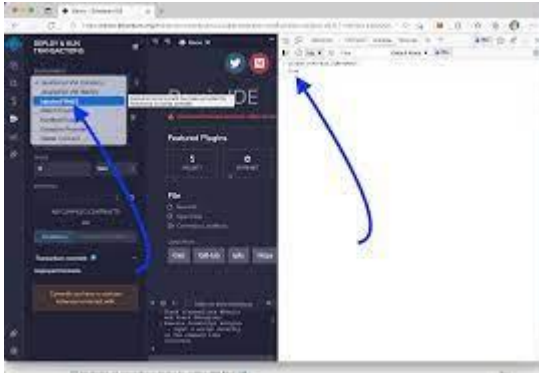
1. Open vs code in the left top select open folder. Select extracted file and open .



2. Select the projectname.sol file and copy the code.

3. Open the remix ide platform and create a new file by giving the name of projectname.sol and paste the code which you copied from vs code.

4. Click on solidity compiler and click compile the projectname.sol
5. Deploy the smart contract by clicking on the deploy and run transaction.
6. select injected provider - MetaMask. In environment



7. Click on deploy. Automatically MetaMask will open and give confirmation. You will get a pop up click on ok.
8. In the Deployed contract you can see one address copy the address.
9. Open vs code and search for the connector.js. In contract.js you can paste the address at the bottom of the code. In export const address.
10. Save the code.

Step 3:

open file explorer

1. Open the extracted file and click on the folder.
2. Open src, and search for utiles.
- 3 . You can see the frontend files. Select all the things at the top in the search bar by clicking alt+ A. Search for cmd

4. Open cmd enter commands

```
npm install
```

```
npm bootstrap
```

```
npm start
```

5. It will install all the packages and after completing it will open {LOCALHOST IP ADDRESS} copy the address and open it to chrome so you can see the frontend of your project.

