

## MVP Implementation

### Project Setup

The project setup phase is a crucial step in MVP (Minimum Viable Product) implementation.

It involves defining the project structure, installing necessary tools, setting up frameworks, and configuring environments.

In this phase, the team ensures that all dependencies are installed correctly, version control is integrated, and initial documentation is prepared.

Proper project setup lays the foundation for smooth development, reduces errors, and ensures that every team member works in a standardized environment. The project setup phase is a crucial step in MVP (Minimum Viable Product) implementation.

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### Core Features Implementation

Core features implementation focuses on developing the essential functionalities of the MVP.

These are the must-have features that define the purpose of the product and provide value to the end users.

This phase avoids unnecessary features and ensures that the team focuses on delivering working functionalities quickly.

Implementation may involve writing backend logic, designing APIs, creating user interfaces, and ensuring usability.

The goal is to provide a usable product with the minimum set of features that can be tested and validated by real users. Core features implementation focuses on developing the essential functionalities of the MVP.

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## **Data Storage (Local State / Database)**

*Data storage plays a vital role in any MVP. Depending on the type of application,*

*local state management or database integration may be required. Local state is used to store temporary data within the application,*

*while databases handle persistent storage for long-term use. Database choices may include SQL-based systems such as MySQL/PostgreSQL*

*or NoSQL databases like MongoDB, depending on scalability and flexibility needs. Efficient data storage ensures smooth application*

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## Testing Core Features

Testing is a critical phase in MVP implementation as it validates whether the developed features

function as expected. Testing can be manual or automated, depending on the complexity of the project. Unit testing ensures

individual components work properly, while integration testing checks if multiple modules interact correctly.

User acceptance testing (UAT) is performed to validate the MVP against user expectations. Early testing helps identify

bugs, improve stability, and provide confidence before release. Testing is a critical phase in MVP implementation as it validates whether the developed features

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## Version Control (GitHub)

Version control is essential for managing changes in source code during MVP development.

GitHub is widely used for collaboration, maintaining code history, and ensuring that multiple developers can contribute

seamlessly. Features like branching, pull requests, and code reviews help maintain code quality and track changes over time.

Using GitHub also facilitates Continuous Integration/Continuous Deployment (CI/CD) pipelines, which speed up the development

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