COURSE DETAILS

Academic Year	:	2024 - 25 (Odd Sem)	Year of Study & Semester	:	I & 01
Course Code & Title	:	U23CS381 & Application Design and Development			

Guidelines for Writing Git Commit Messages

🧱 Attention, Future Superstars! 🌞



1. Header:

The header is the most crucial part of a commit message. It includes the type of change, an optional scope, and a brief subject.

- **Type**: This indicates the nature of the change. Some common types include:
 - feat: A new feature.
 - fix: A bug fix.
 - docs: Documentation changes.
 - o style: Code style changes (formatting, missing semi-colons, etc.).
 - o refactor: Code refactoring without changing external behavior.
 - test: Adding or fixing tests.
 - o chore: Maintenance tasks (e.g., build process changes).
- **Scope**: The scope is optional but helps indicate the area of the codebase affected by the change. It's written in parentheses after the type:
 - feat(auth): A new feature related to authentication.
 - fix(ui): A bug fix in the user interface.
- **Subject**: This is a brief description of the change. Write it in the imperative mood (as if giving a command):
 - o Good: Add search functionality to the header component
 - Bad: Added search functionality (Avoid past tense)

Example Header:

feat(auth): add password reset feature

2. Body:

The body provides a detailed explanation of the change. It includes what was changed, why it was changed, and any additional context or background.

- **What:** Describe what has been done in this commit.
 - o Example: Added password reset functionality to the authentication system
- **Why:** Explain the reasons behind making this change.
 - o Example: This change allows users to reset their passwords if they forget them, improving user experience and security.
- **How:** Briefly describe how the change was implemented.

 Example: - Implemented backend API for sending password reset emails and frontend forms for users to submit their new passwords.

Example Body:

- Added password reset functionality to the authentication system
- This change allows users to reset their passwords if they forget them, improving user experience and security.
- Implemented backend API for sending password reset emails and frontend forms for users to submit their new passwords.

3. Footer:

The footer is used for referencing any issues related to the commit or providing additional information.

- **Issue Reference:** If the commit resolves an issue, include the reference.
 - o Example: Closes #123
- Example Body:

Closes #123

Full Example Commit Message:

feat(auth): add password reset feature

- Added password reset functionality to the authentication system
- This change allows users to reset their passwords if they forget them, improving user experience and security.
- Implemented backend API for sending password reset emails and frontend forms for users to submit their new passwords.

Closes #123

Additional Tips for Writing Good Commit Messages:

- 1. Be Concise but Descriptive: The header should summarize the change in about 50 characters or less.
- 2. Use the Imperative Mood: Write as if you are commanding the code to do something. For example, "Add feature" instead of "Added feature."
- 3. Separate Logical Changes: Each commit should represent a single logical change. Avoid bundling unrelated changes in one commit.
- 4. Reference Issues and PRs: Use the footer to reference issues, pull requests, or other related tickets to provide context.

