

Product Versioning

Product versioning is crucial for effective software development, providing a structured approach to releases. In addition to Major, Minor, and Patch releases, the use of alpha and beta versions adds depth to the development cycle.

Key Elements: [🔗](#)

1. Semantic Versioning (SemVer):

- Major.Minor.Patch structure for clarity.
- Optional pre-release and build metadata.

2. Release Types:

- Major: Signifies significant changes.
- Minor: Introduces new features.
- Patch: Addresses bug fixes.

3. Pre-release Versions:

◦ Alpha Release:

- Early development stage.
- Basic functionality, often for internal testing.
- Denoted as `1.0.0-alpha.1`, indicating the alpha stage.

◦ Beta Release:

- More stable than alpha.
- Released to a wider audience for testing.
- Denoted as `1.0.0-beta.1`, indicating the beta stage.

4. Version Control:

- Git manages version history.
- Tags and branches mark versions.

5. Documentation:

- Changelog records changes.
- Detailed documentation supports users.

6. Compatibility:

- Consider backward and forward compatibility.