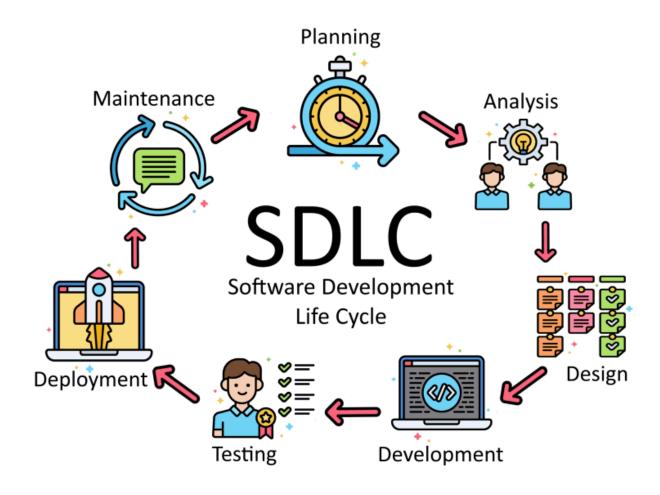




## BMAD-METHOD™

DataOps Team

# Software Development Life Cycle (SDLC)





### What is BMAD-METHOD™?

- Breakthrough Method for Agile Al Driven Development
- A revolutionary framework that combines:
  - Agentic Planning: Specialized Al agents collaborate to create comprehensive product documentation
  - Context-Engineered Development: Hyper-detailed stories with embedded implementation guidance

"Eliminates planning inconsistency and context loss in development"



### **Two-Phase Workflow**

### Phase 1: Planning

- 1. Research & Analysis
- 2. Project Brief Creation
- 3. Product Requirements Document
- 4. System Architecture
- 5. Document Alignment

See the complete workflow in the User Guide

### Phase 2: Development (IDE)

- 1. Story Creation from Epics
- 2. Context-Engineered Implementation
- 3. Validation & Testing
- 4. Iterative Refinement



### **BMAD™** Architecture

Official Repository: https://github.com/bmad-code-org/BMAD-METHOD/



## **BMAD™** Agents

- 1. **Analyst**: Market research, brainstorming, competitive analysis, project briefs
- 2. PM: PRDs, product strategy, feature prioritization, roadmaps, stakeholder communication
- 3. Architect: System design, architecture docs, technology selection, API design, infrastructure
- 4. PO: Backlog management, story refinement, acceptance criteria, sprint planning
- 5. **SM**: Story creation, epic management, retrospectives, agile process guidance
- 6. **Dev**: Code implementation, debugging, refactoring, development best practices
- 7. QA: Code review, refactoring, test planning, quality assurance, mentoring
- 8. **UX Expert**: UI/UX design, wireframes, prototypes, front-end specs, user experience
- 9. **BMAD™ Master**: Cross-domain expertise, one-off tasks, general purpose agent
- 10. **BMAD™ Orchestrator**: Workflow coordination, multi-agent tasks, role switching guidance



## **Templates & Project Types**

#### **Document Templates**

- Project Brief Template: Initial planning
- **PRD Template**: Product requirements
- Architecture Template: System design
- Story Template: Development tasks

### **Project Types**

- Greenfield (new projects): UI, Service, FullStack
- Brownfield (existing codebases): UI, Service, FullStack



## **Context-Engineered Stories**

#### **Traditional Story**

As a user, I want to login. So that I can access my account

#### **BMAD™** Story

```
# Story: User Authentication Implementation
## Context
- Architecture: Microservices with JWT
- Tech Stack: React, Node.js, PostgreSQL
- API Endpoints: POST /auth/login
- Database Schema: users table (id, email, password_hash)
## Implementation Details
[Full technical specifications embedded]
## Acceptance Criteria
[Detailed test scenarios]
```

8



## **Universal Applications**

## **Beyond Software Development**

- Business Strategy: Strategic planning with Business Analyst agent
- Creative Writing: Story development with Writer agent
- Research Projects: Academic planning with Researcher agent
- Game Development: RPG campaigns with Game Master agent

The framework adapts to any structured creative process!



# **Getting Started**

1. Install BMAD-METHOD™

```
npx bmad-method@4.40.0 install
```

2. Start with BMAD™ Analyst Agent

```
/BMad:agents:analyst
*help
```

3. Create your first document

```
*brainstorm {topic}
```

4. Follow the workflow!



### **Advanced Features**

#### **Codebase Flattener**

Converts entire projects to Al-consumable XML:

npx bmad-method flatten --input ./src --output project.xml



### **Good Practices**

**Practice 1: Complete Planning Phase** 

Always complete PRD and Architecture before development

**Practice 2: Manage Context Effectively** 

Keep stories focused on single features

**Practice 3: Leverage Agent Specialization** 

Use the right agent for each task



## **Key Takeaways**

- 1. **BMAD-METHOD™** = Agentic Planning + Context Engineering
- 2. Two-phase workflow ensures comprehensive planning
- 3. Specialized agents provide domain expertise
- 4. **Templates & checklists** maintain quality
- 5. Universal framework adapts to any domain
- 6. **Community-driven** evolution and support



## BMAD-METHOD™ in Al Singapore

#### **BMAD™ Al/ML Engineering Expansion Pack:**

- Al Singapore specialized agents
- Al Singapore program-specific workflows (MVP, POC, SIP, LADP)
- Specialized templates for ML/LLM development
- Unified AI security, ethics, and governance



# BMAD-METHOD™ in Al Singapore (2)

#### Agents:

- ML/Al Engineer & MLOps Specialist ( ml-engineer )
- ML/Al System Architect ( ml-architect )
- Senior Data Scientist ( ml-data-scientist )
- ML Security & Ethics Specialist ( ml-security-ethics-specialist )
- ML Research Scientist & Experimental Design Specialist ( ml-researcher )



## BMAD-METHOD™ in Al Singapore (3)

#### Workflows:

- 6-Month MVP Projects (aisg-mvp-workflow)
- 3-Month POC Projects (aisg-poc-workflow)
- 3-Month SIP Short Industry Projects (aisg-sip-workflow)
- 4-Month LADP LLM Application Developer Programme (aisg-ladp-workflow)



### Resources

#### **Official Documentation**

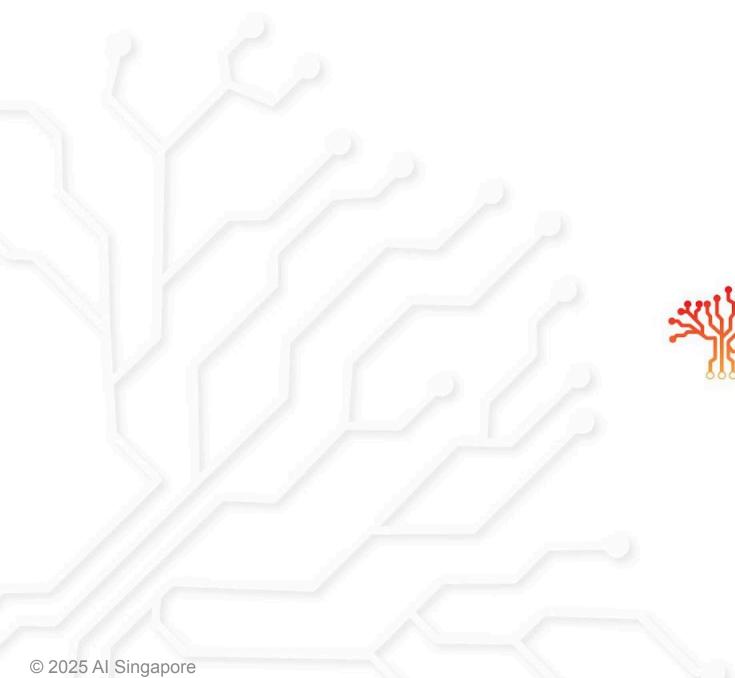
- GitHub: BMAD-METHOD™: Universal Al Agent Framework
- YouTube: The Official BMad-Method Masterclass (The Complete IDE Workflow)
- BMAD™ Al/ML Engineering Expansion Pack: BMAD-AISG-AIML



## **Questions?**

**Let's Build Something Amazing with BMAD-METHOD™!** 







## Thank you

www.aisingapore.org