

# GA02 - Seminar Proposal

## Student info

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## Self evaluation

Criteria	Description	Points
Relevance	Topic fits the course and current web development trends: Applied AI in development	2
Clarity	Objectives and scope are clearly defined	2
Originality	Demonstrates independent thinking or a unique angle	2
Feasibility	Can be realistically covered in a short seminar	2
Presentation Quality	Document is clear, concise, and well-formatted	2

=> Self evaluated score: 10

## Seminar Proposal

### 1. Seminar Title

“Accelerating Web Application Development with Spec-Driven Development and Spec Kit”

### 2. Introduction / Background

In modern web application development, teams face pressure to deliver high-quality features rapidly while maintaining architecture consistency, proper testing, and alignment between product vision and implementation.

With the rise of AI-assisted coding tools, developers now have powerful aids to help generate code snippets, boilerplate, and even complex logic. However, integrating these tools into a coherent development workflow remains a challenge. If not managed well, the use of AI coding agents can lead to fragmented codebases, misaligned implementations, and increased technical debt.

The emerging paradigm of *Spec-Driven Development (SDD)* flips the traditional workflow by making specifications the primary artifact and enabling tools (such as Spec Kit) to translate those specs — often with AI assistance — into working implementations. The approach offers potential gains in aligning product

intent, reducing misinterpretation, and speeding up feature delivery in a web-stack context. ([GitHub Documentation][1])

### 3. Objectives:

By the end of this seminar, participants will be able to:

1. Explain the architecture and philosophy of Spec-Driven Development and how Spec Kit supports it.
2. Demonstrate how a web application feature (frontend + backend) can be scaffolded using Spec Kit's workflow.
3. Critically compare the benefits and limitations of Spec-Driven Development in real-world web dev teams.
4. Identify scenarios where Spec-Driven Development is most applicable, and where traditional workflows may still be preferred.

### 4. Scope and Relevance:

- This seminar will focus on the SDD workflow in the context of **modern web applications**: frontend (e.g., React/Vue/Svelte) + API/backend + database.
- We'll cover how Spec Kit integrates with AI coding agents (e.g., GitHub Copilot, Claude), and review how the spec → plan → tasks → implementation phases work.
- The discussion will include practical considerations such as when SDD is appropriate (greenfield vs. legacy), how it interacts with agile workflows, and how web-dev teams could adopt or resist it.
- It does **not** aim to deeply cover the internals of every supported AI agent, nor will it provide exhaustive code walkthroughs of a large system—rather, we'll use a representative web-feature to illustrate the workflow.

### 5. Expected Outcomes

Participants will leave with:

- A clear understanding of the concept of Spec-Driven Development (SDD) and its role in modern web development workflows.
- Knowledge of how SDD aligns product intent with implementation to reduce misinterpretation and technical debt.
- An understanding of how SDD integrates with AI coding tools like GitHub Copilot to enhance productivity.
- Practical insights into using Spec Kit to scaffold a web application feature, including both frontend and backend components.
- The ability to identify the strengths and limitations of SDD in comparison to traditional development workflows. Participants should be able to determine which scenarios SDD should be applied to.

### 6. References

- Spec Kit official GitHub repository and documentation. ([GitHub][2])
- Blog article "Spec-Kit tames AI-coding chaos with Spec-Driven Development". ([virtuslab][3])
- Vietnamese article "Spec-Driven Development (SDD): Khám phá phương pháp..." ([Evotek][4])

[1]: [https://github.github.com/spec-kit/index.html?utm\\_source=chatgpt.com](https://github.github.com/spec-kit/index.html?utm_source=chatgpt.com) "Spec Kit | Spec Kit Documentation"

[2]: [https://github.com/github/spec-kit?utm\\_source=chatgpt.com](https://github.com/github/spec-kit?utm_source=chatgpt.com) "GitHub - github/spec-kit: 🛠️ Toolkit to help you get started with Spec-Driven Development"

[3]: [https://virtuslab.com/blog/ai/spec-kit-tames-ai-coding-chaos/?utm\\_source=chatgpt.com](https://virtuslab.com/blog/ai/spec-kit-tames-ai-coding-chaos/?utm_source=chatgpt.com) "Spec-Kit taming AI-coding chaos with Spec-Driven Development"

[4]: [https://tuyendung.evotek.vn/spec-driven-development-sdd-kham-pha-phuong-phap-phat-trien-phan-mem-huong-dac-ta-trong-ky-nguyen-ai/?utm\\_source=chatgpt.com](https://tuyendung.evotek.vn/spec-driven-development-sdd-kham-pha-phuong-phap-phat-trien-phan-mem-huong-dac-ta-trong-ky-nguyen-ai/?utm_source=chatgpt.com) "Spec Driven Development (SDD): Khám Phá Phương Pháp Phát Triển Phần Mềm Hướng Đặc Tả Trong Kỳ Nguyên AI – Evotek Careers"