Accelerating Go Development with Claude Code: A Pragmatic Approach

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Dev with AI

- dev < dev with AI
- Continuously evolving
- A lot of noise

Goal

- What works for me (so far)
- Open Discussion



+ Tools

Models

- Anthropic models lead
- claude → better results
- <u>Cut-off</u> march 2025

Models

Models have strengths and weaknesses:

- Claude Code
- Gemini

Context



CLAUDE.md

- Keep it up-to-date.
- Update it when new features are added.
- Create a command for easy updates.

context7 mcp

- Fetches on-demand documentation and code snippets.
- Additionally:
 - Add links to <u>prompts</u>.
 - Add information to memory/.
 - Or save to docs-ai/.

.claude/memory

```
Memory ( .claude/memory ):
```

- Convention, not automatically read (docs).
- Use for one-off prompts (e.g., migration_sqlite_to_psql.md).
- Store best practices.
- Save prompts for future use (e.g., memory-template).

docs-ai / ai-docs

- More extensive docs and larger mds.
- You can link them in CLAUDE.md.

Repository

- Modular design
- Vertical project structure
- CLAUDE.md files in subfolders

Context

Read .claude/memory/* and ... use command ...

Plan.md

- Keep the model on the track
- When it double, create it
- MUST for anything more complicated
- Benefits for the model

Prompt for Claude Code

- The CLEAR Framework
- Keywords, e.g., exactly, detaile, ...
- Role-based

```
You are a [ROLE] with expertise in [DOMAIN]. Your task is to [SPECIFIC_ACTION].
```

1. Task context 2. Tone context 3. Background data, documents, and images 4. Detailed task description & rules 5. Examples 6. Conversation history 7. Immediate task description or request 8. Thinking step by step / take a deep breath 9. Output formatting 10. Detailed response (if any)

Will help:

- Good to watch 1-2 videos about prompt engineering
- <u>prompt optimizer</u> at claude.ai
- Claude can review your prompts as well.

Tools

Claude:

- hooks
- Opentelemetry
- ccusage

Tools

Basic:

- CLI: gh
- Python ad hoc
- mcp few really worth it

Go-Specific Al Integration

- Go modules and dependency management
- Strict formatting (gofmt, golangci-lint)
- Testing conventions (*_test.go)
- Interface design patterns

• Continuous Effort

- Share the learnings with your team
- Al retrospectives

More verticals in your app, the easier for the model

- Model
- Context
- Prompt
- Tools

Demo → **Claude**

github.com/wojciech12/talks & wbarczynski.pl

Thank you