

# **Building a Copilot based on Gemini**

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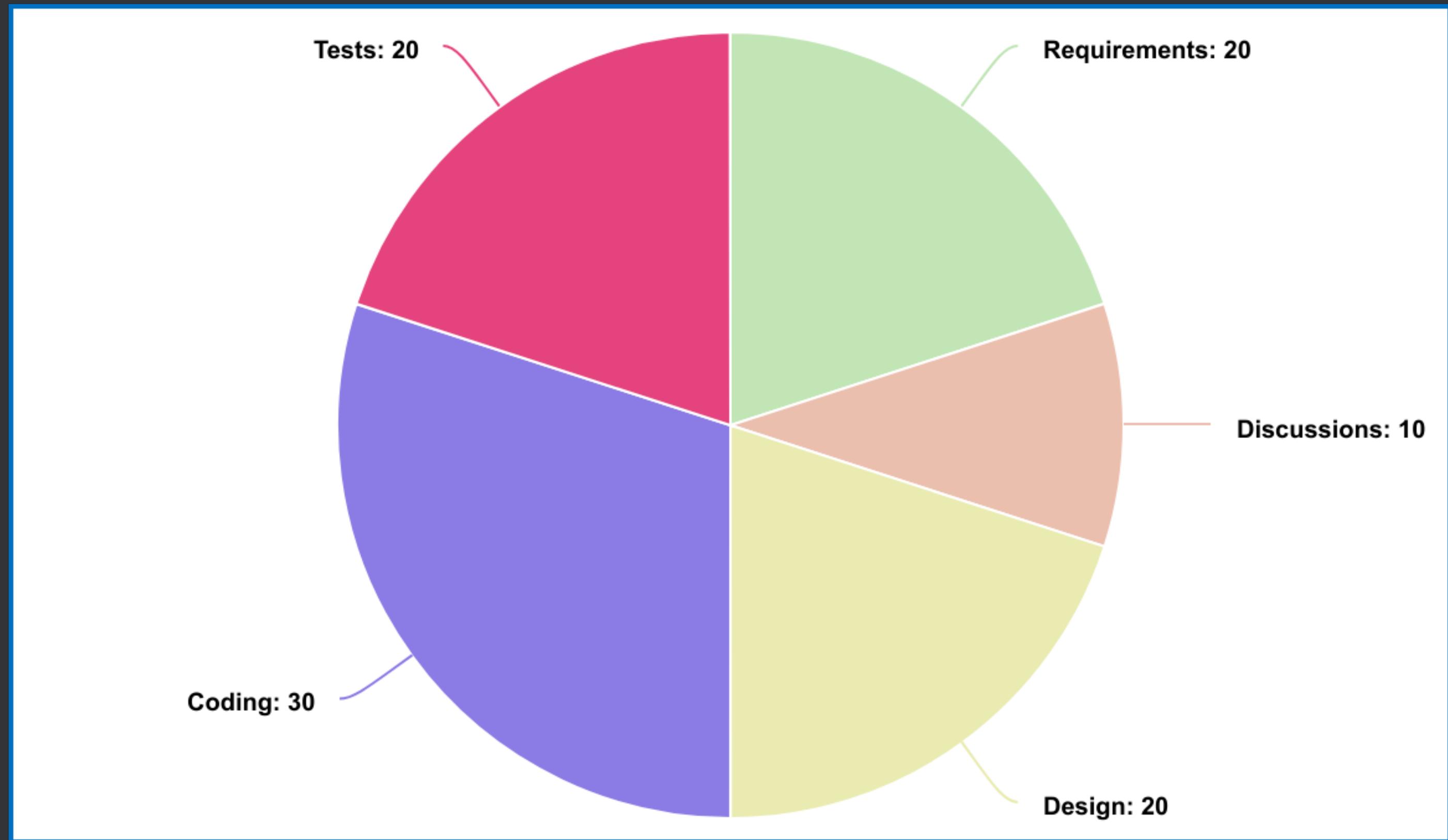
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# A day of a Software Engineer

- Eat
- Code
- Sleep
- Repeet

# Code

- Gathering requirements
- Heated discussions with the team
- Drafting a plan and code design
- Filling in the gaps
- Writing tests



# Code copilots

- Write the basics
- Generate the rest



# Context Window

- Avg LLM has 30-60k token window, what's roughly 25-50k words
- Average project is around 500k tokens
- It doesn't fit!

# Workarounds

- Copy-paste different classes
- Work only on smallest parts that don't require external interfaces
- Chat with the model until it gets everything

# A Bright New World

- Increase context!
- Google Gemini 1.5
- 1 mln token context
- The whole project in the prompt

# Continue.dev

- An open-source autopilot in your IDE
- Connected to Gemini 1.5
- Generate
- Refactor
- Explain

# Duet AI

- Works with a smaller model
- Experiments with RAG
- Potentially, bigger context

# Results

- Model knows all your model
- Project knowledge is great
- No Abstract Code Tree

# Costs

- ?

# Future

- Boilerplate is generated
- Working with people becomes more important
- Search on all codebase -> Codegen on all codebase

# Questions?