

# Going Full Stack with Dart



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# About me

- CTO & Co-Founder of Somnio Software
- Flutter & Dart GDE
- Software Engineer
- Speaker of Flutter
- Organizer of Flutter Montevideo Meetup

# Agenda

- Motivation
- Challenges
- State of the art
- Comparison between frameworks
- Demo
- Conclusions & Next steps



# Motivation

- Different programming languages like TypeScript
- Context switching
- Code reuse on frontend and backend
- Developer experience and tooling
- Dart being a great language



# Challenges

- Backend
- Deployment
- Docker
- Cloud run
- Database
- Caching
- Authentication
- CI/CD



# Backend

- REST
  - GraphQL
  - Web Socket
  - gRPC
- JSON
  - Protocol buffers



# State of the art

- Shelf
- Dart frog
- Serverpod





# Shelf

- Shelf makes it easy to create and compose web servers and parts of web servers.
- Plug and play in a modular way
- Maintained by the Dart team
- `pub.dev` libraries written for Shelf





# Dart frog

- “Fast minimalistic backend framework for Dart”
- Higher level abstraction on top of shell
- Made and maintain by open-source team at Very Good Ventures



# Serverpod

- “an open-source, scalable app server written in Dart for the Flutter community.”
- Full framework for Flutter and Dart
- More features out of the box, more opinionated.



# Serverpod

- File uploads
- Authentication
- Data streaming
- Task scheduling
- Health checks
- Easy deployment



# Demo

- Full stack App with Flutter and Shelf / Dart frog



# Conclusions

- Choosing your framework carefully
- Flexibility, customizations
- Out of the box features
- Dart vs BAAS
- Dart vs other programming languages



# Next steps

- <https://dartfrog.vgv.dev/>
- <https://serverpod.dev/>
- <https://pub.dev/packages/shelf>
- <https://blog.codemagic.io/writing-your-backend-in-dart>



# Thank you!

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