



KeyCloud

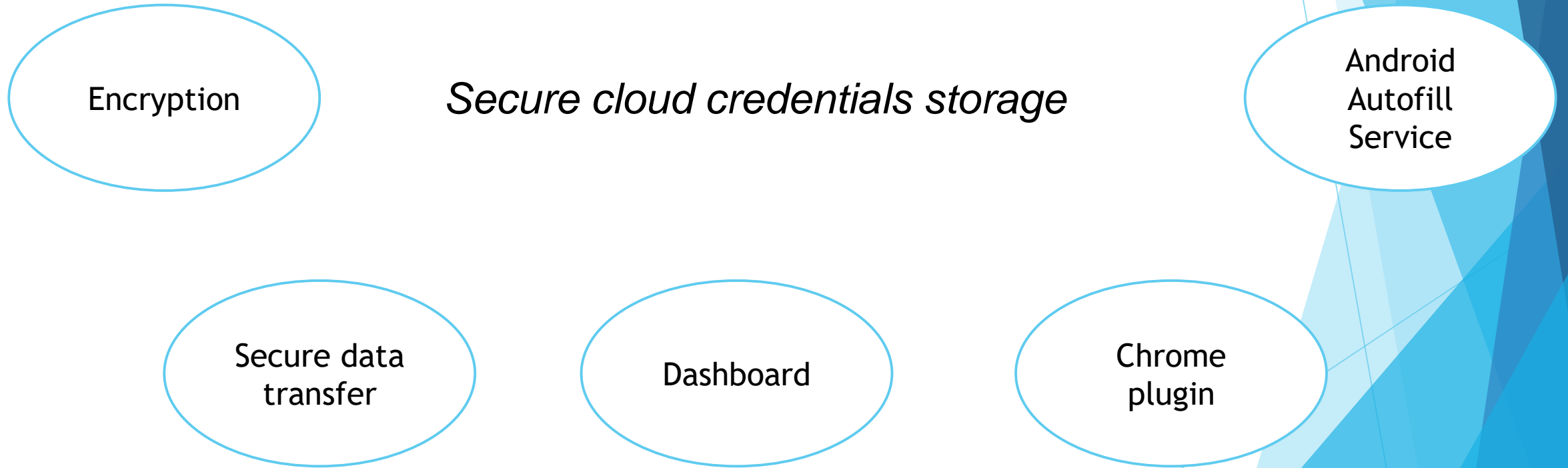
Florian Drescher, Philipp Heil, Lukas Priester

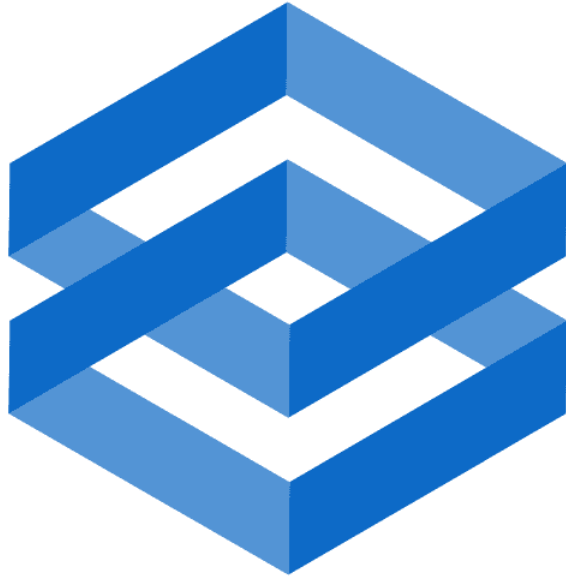


Agenda

- Vision
- SRS
- Scopes
- Project Methodology
- Time Estimation
- Risk Management
- Demo
- Architecture
- Configuration
- Automation
- Tests

Vision





Software Requirements

- ▶ Simple interfaces with maximum functionality
- ▶ Secure and high availability
- ▶ Clean Code and use of best practices
- ▶ Easy to maintain
- ▶ SRS <https://github.com/keycloud/docs/blob/master/doc/SRS.md>

Scopes



Please sign in

☐ Use 2FA

Sign in

Register

Register

Scopes



KeyCloud Overview Settings

Password list

#	Username	Link	Password
0	Flo	https://www.facebook.com	Copy to Clipboard ✕
1	Dudeldu	https://www.github.com	Copy to Clipboard ✕
2	Max Mustermann	https://www.gmail.com	Copy to Clipboard ✕
			+

[Add a new password](#) [Get password](#) [Remove a password](#)

Scopes

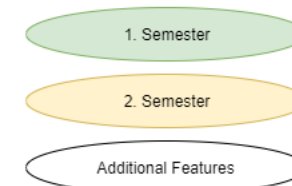
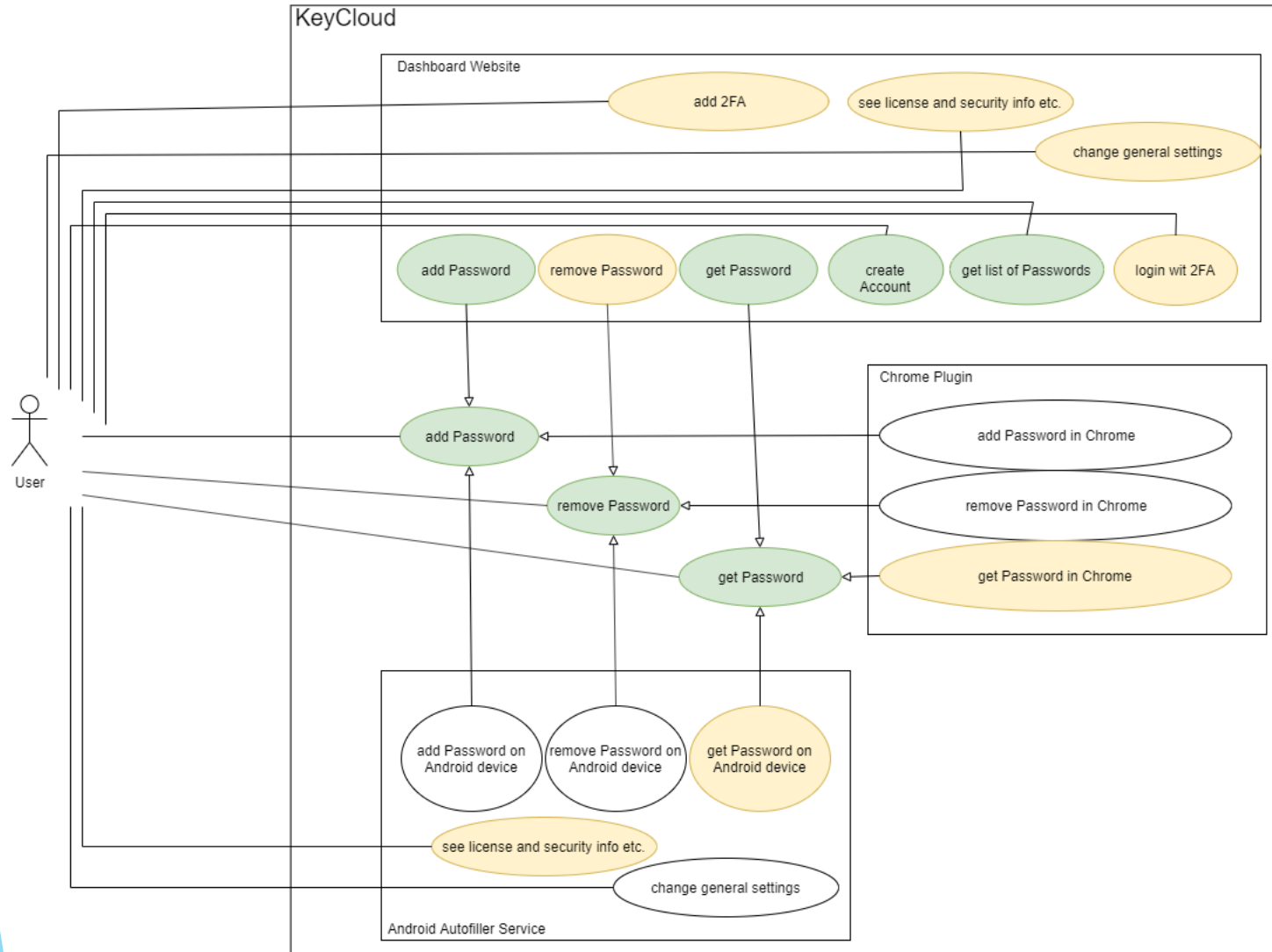


User 1

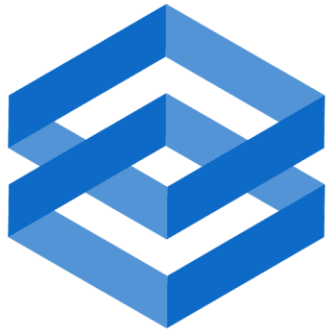
Your Password:

Add 2FA

Overview



Project Methodology



- ▶ Scrum (1 week sprint)
- ▶ Flat hierarchies
- ▶ Roles according to RUP (Rational Unified Process) terminology

Iterative Process

- Agile work environment
- Scope can be adjusted to fit the needs of the customer



Project Management



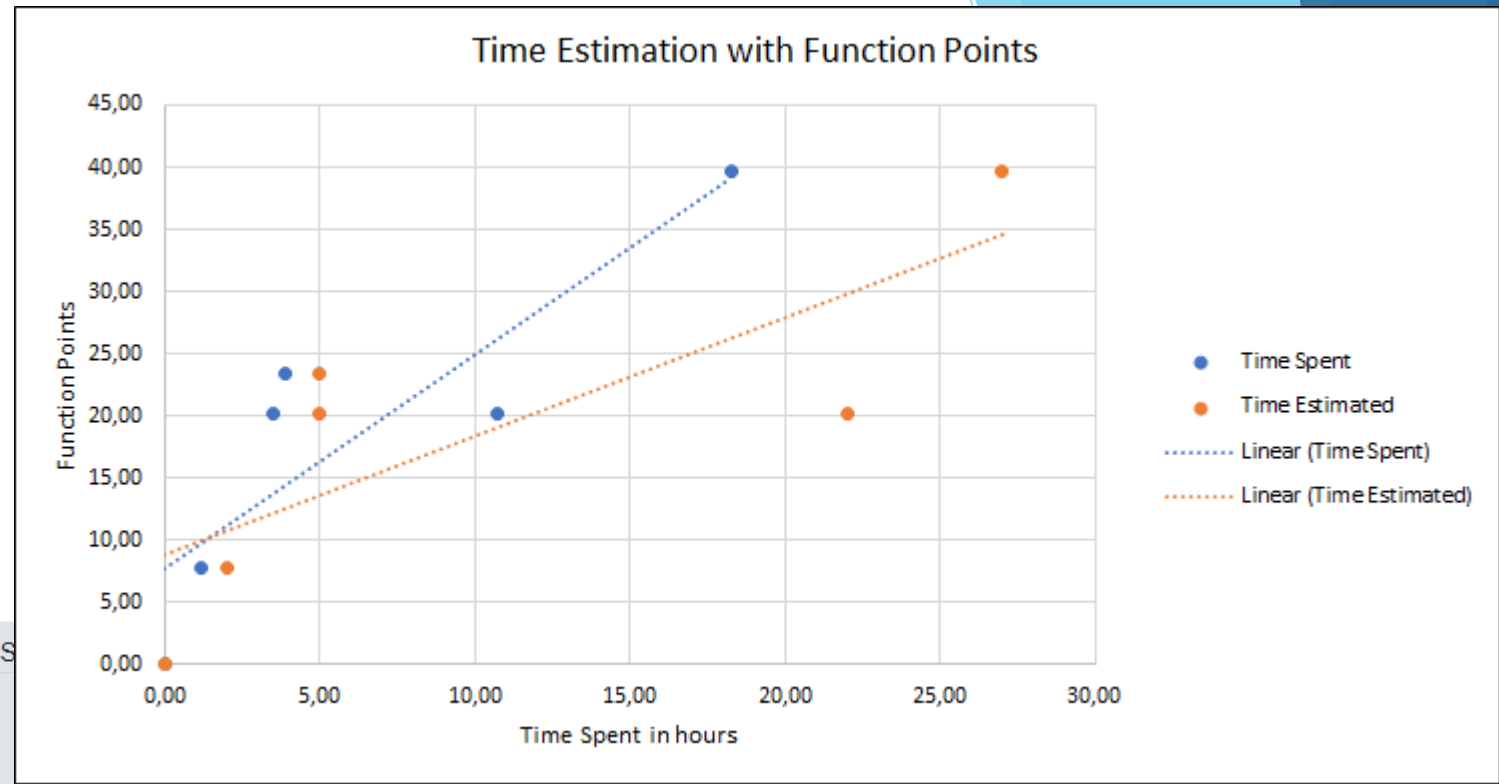
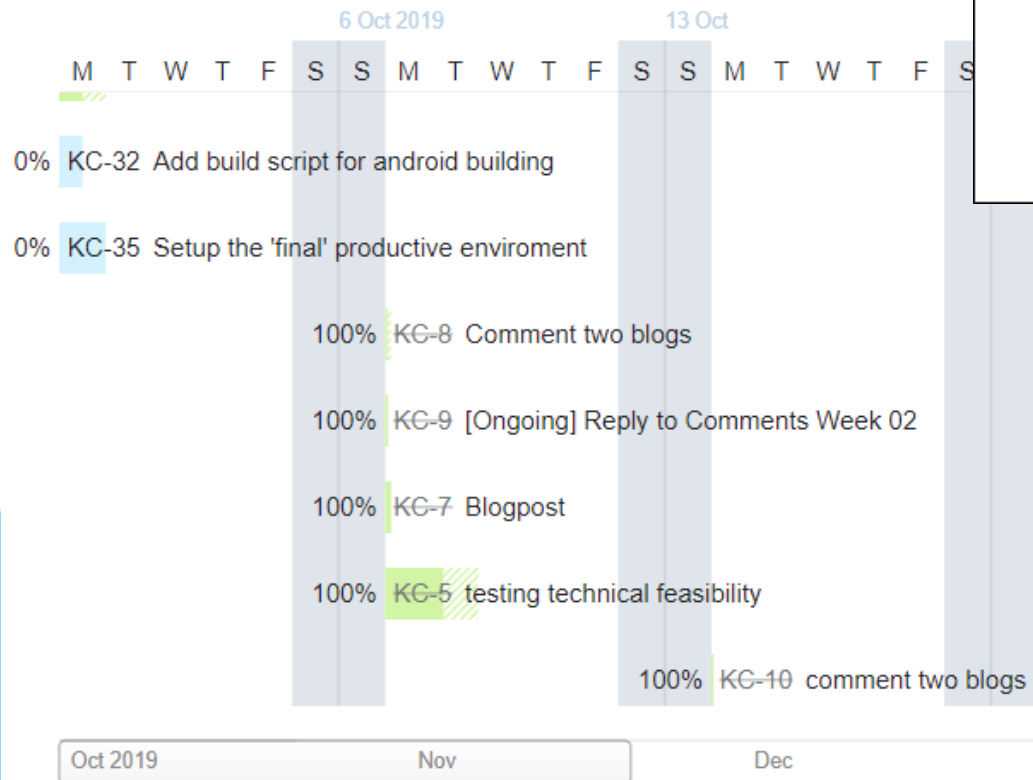
- Agile board (YouTrack)

The screenshot displays the YouTrack Agile board interface. At the top, there's a navigation bar with links for Issues, Dashboards, Agile Boards, Reports, and Projects, along with a 'Create' button. Below this is a search bar labeled 'KeyCloud' and a filter section for 'Filter cards on the board'. The main area shows a Kanban board with four columns: 'Open' (2h), 'To be discussed' (2h), 'In Progress' (2d), and 'Fixed' (1d30m). The 'Open' column has one card: 'KC-58 Refactor TeamCity configuration' (Critical, 2h). The 'To be discussed' column has one card: 'KC-37 monitoring tools' (Normal, 2h). The 'In Progress' column has two cards: 'KC-17 [Todo: 2] UC Diagrams' (Normal, 3h 33m, 1d) and 'KC-64 Midterm preparation' (+1 Show-stopper, 1d). The 'Fixed' column has three cards: 'KC-63 Read database config from .ini file' (Normal, 12m), 'KC-62 Fix SAD' (Normal, 10m, 30m), and 'KC-6 create a logo' (Critical, 4h, 1d). The board owner is 'zkdev'. A 'New swimlane ...' button is at the bottom right.

Board owner: zkdev

New swimlane ...

Time Estimation



Risk Management

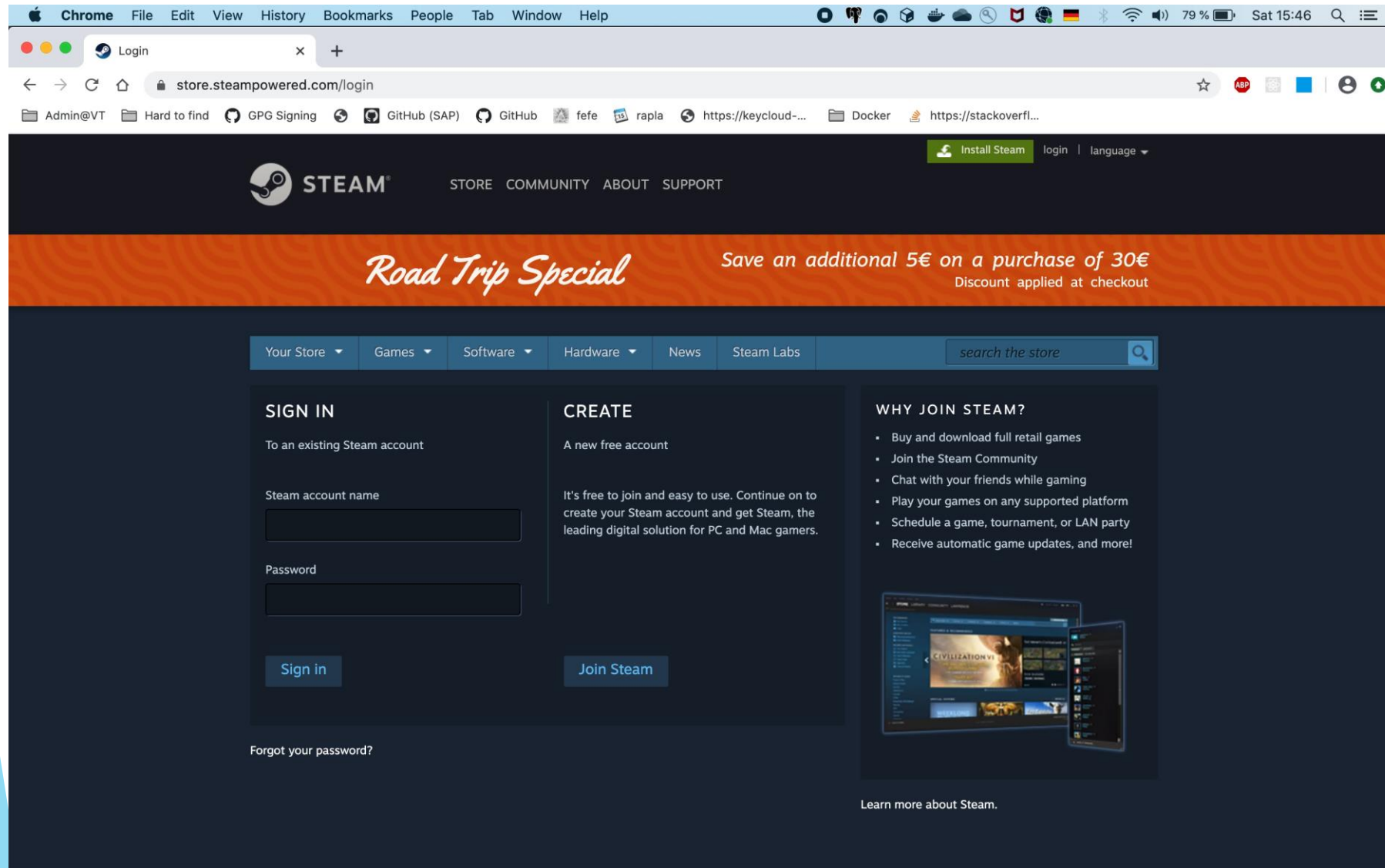


Risk	Prob. of Occurrence	Damage	Mitigation Strategy	Risk factor
Landscape Migration	medium	high	Backup strategy, switch back to old hosting solution, that already worked	high
Time delay	high	medium	Rebalance work load between team members, at least after the week on the next sprint meeting	medium
Disagreement	medium	medium	Open discussion, realignment, democratic choice out of three	medium
Underestimation of complexity	low	high	redefine scope	medium
Sickness	low	medium	Know each others code well, worst-case: redefine scope	low
Data loss	low	low	Accurate git version control usage	low

Demo



Further Functions



The screenshot shows the Steam store's login page in a Chrome browser. The browser's address bar shows 'store.steampowered.com/login'. The page features a dark blue header with the Steam logo and navigation links: STORE, COMMUNITY, ABOUT, and SUPPORT. A green 'Install Steam' button is also present. Below the header, an orange banner advertises a 'Road Trip Special' with a 5€ discount on a 30€ purchase. The main content area is divided into three sections: 'SIGN IN' for existing accounts, 'CREATE' for new accounts, and 'WHY JOIN STEAM?' which lists benefits like buying games, joining the community, and receiving updates. A search bar is located at the top right of the main content area. The bottom of the page includes a link to 'Learn more about Steam.'

Chrome File Edit View History Bookmarks People Tab Window Help

store.steampowered.com/login

Admin@VT Hard to find GPG Signing GitHub (SAP) GitHub fefe rapla https://keycloud-... Docker https://stackoverflowfl...

Install Steam login | language

STEAM® STORE COMMUNITY ABOUT SUPPORT

Road Trip Special Save an additional 5€ on a purchase of 30€
Discount applied at checkout

Your Store Games Software Hardware News Steam Labs search the store

SIGN IN
To an existing Steam account

Steam account name
Password

Sign in

CREATE
A new free account

It's free to join and easy to use. Continue on to create your Steam account and get Steam, the leading digital solution for PC and Mac gamers.

Join Steam

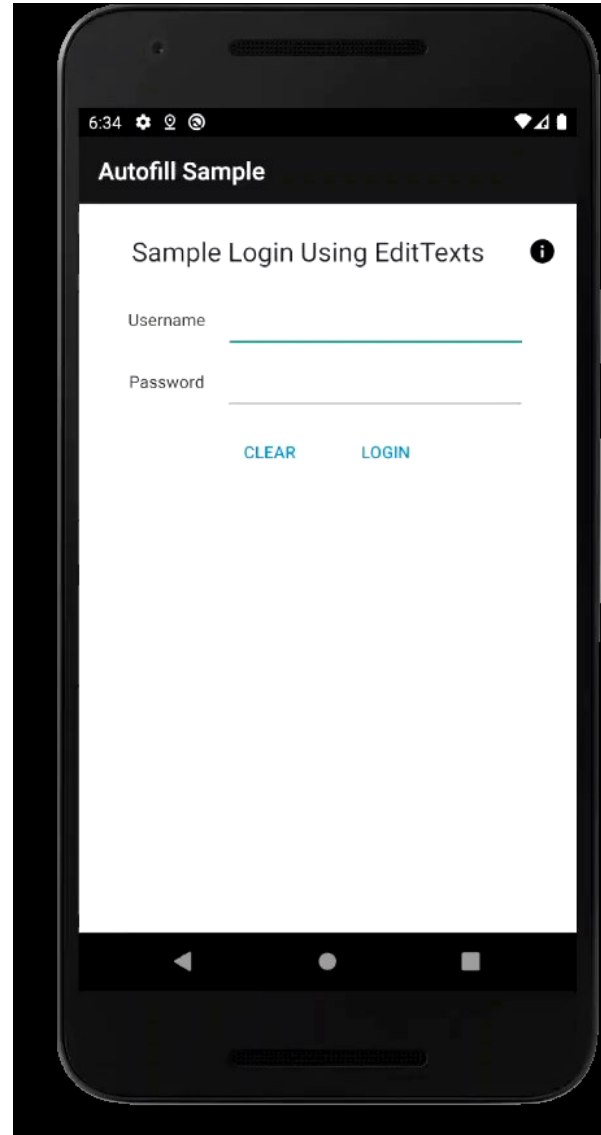
WHY JOIN STEAM?

- Buy and download full retail games
- Join the Steam Community
- Chat with your friends while gaming
- Play your games on any supported platform
- Schedule a game, tournament, or LAN party
- Receive automatic game updates, and more!

Learn more about Steam.



Further Functions



Technology Stack

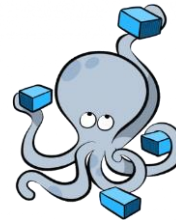
▶ PROJECT MANAGEMENT



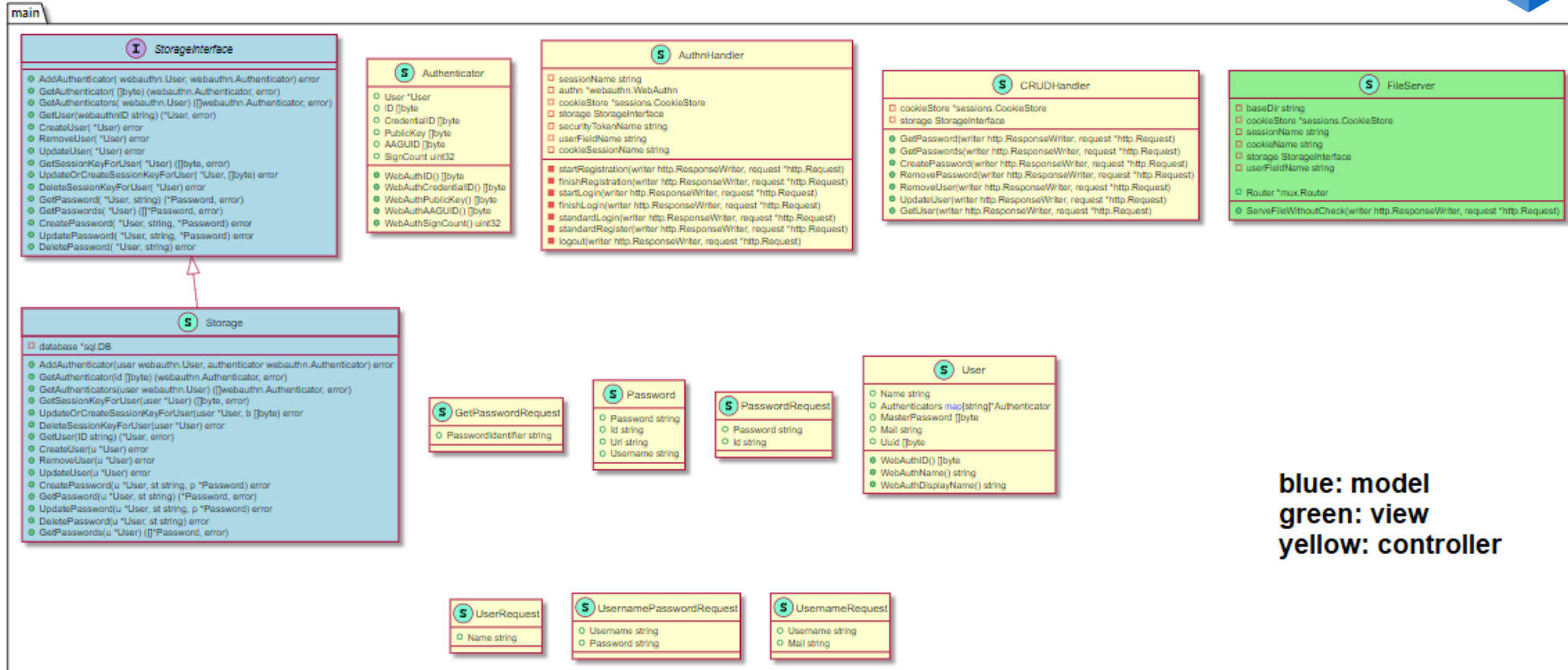
▶ DEVELOPMENT



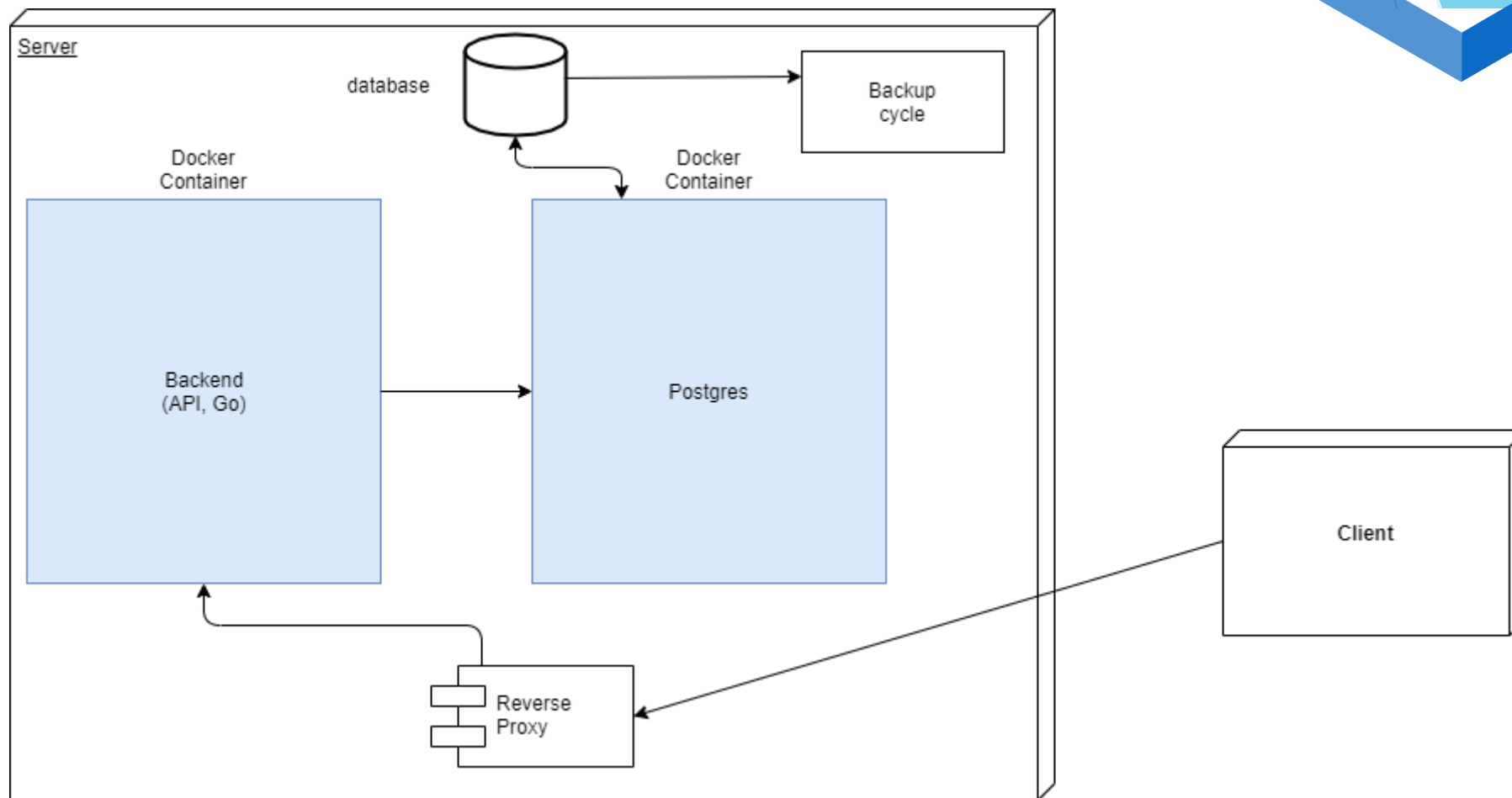
▶ CI/CD



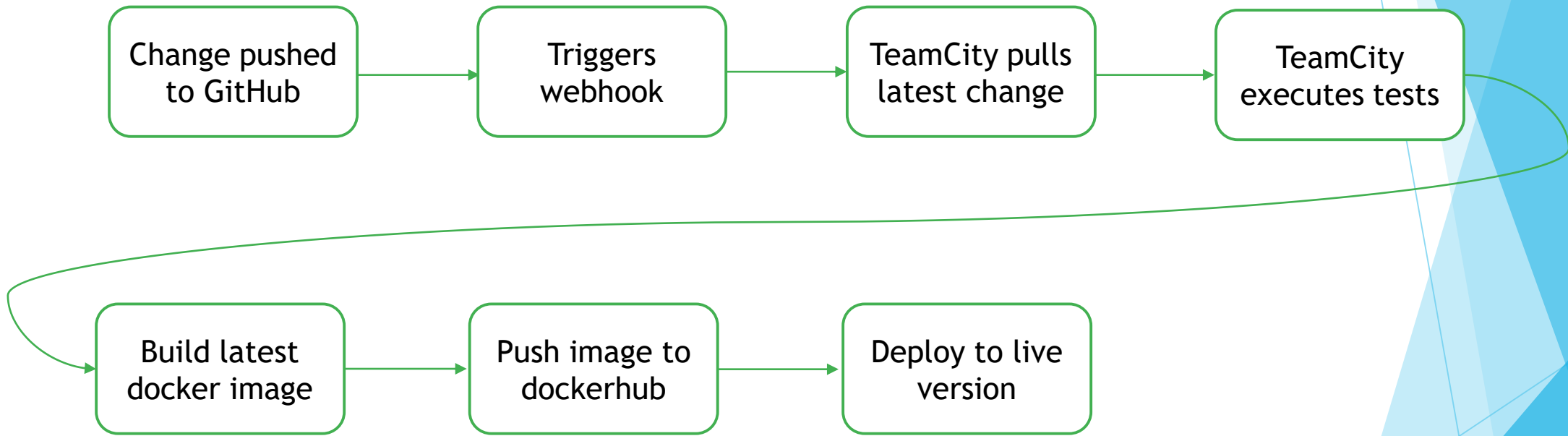
Class Diagramm



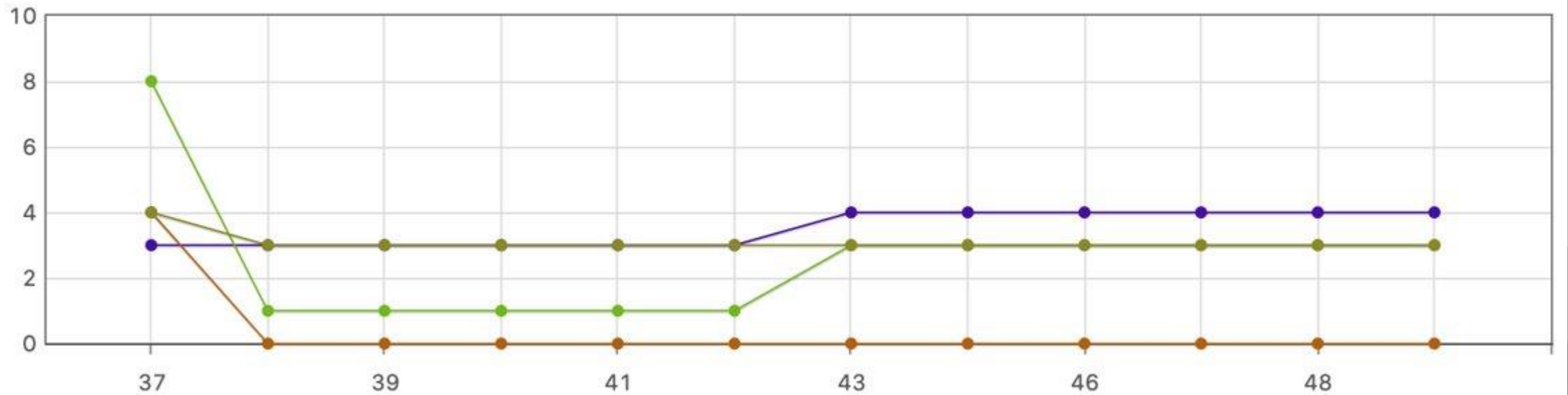
Configuration



Automation



Code Metrics



```
router.Handle("/user", crud.GetUser).methods("get")  
router.Handle("/user", crud.RemoveUser).methods("delete")  
router.Handle("/user", crud.UpdateUser).methods("put")
```

30.06.2020

Tests

- Cucumber
- Unittests (go tests)
- Karmatests (Angular)
- External Testperson

```
===== Coverage summary =====
Statements   : 27.17% ( 75/276 )
Branches     : 3.57% ( 1/28 )
Functions    : 23.17% ( 19/82 )
Lines       : 24.81% ( 64/258 )
=====
```

```
=== RUN   TestAuthnHandler_standardLogin
--- PASS: TestAuthnHandler_standardLogin (0.01s)
=== RUN   TestAuthnHandler_standardRegister
--- PASS: TestAuthnHandler_standardRegister (0.00s)
=== RUN   TestAuthnHandler_startRegistration
--- PASS: TestAuthnHandler_startRegistration (0.00s)
=== RUN   TestAuthnHandler_startLogin
--- PASS: TestAuthnHandler_startLogin (0.00s)
=== RUN   TestCRUDHandler_GetPassword
--- PASS: TestCRUDHandler_GetPassword (0.00s)
=== RUN   TestCRUDHandler_GetPasswords
--- PASS: TestCRUDHandler_GetPasswords (0.00s)
=== RUN   TestCRUDHandler_CreatePassword
--- PASS: TestCRUDHandler_CreatePassword (0.00s)
=== RUN   TestCRUDHandler_RemovePassword
--- PASS: TestCRUDHandler_RemovePassword (0.00s)
=== RUN   TestCRUDHandler_RemoveUser
--- PASS: TestCRUDHandler_RemoveUser (0.00s)
=== RUN   TestCRUDHandler_UpdateUser
--- PASS: TestCRUDHandler_UpdateUser (0.00s)
=== RUN   TestCRUDHandler_GetUser
--- PASS: TestCRUDHandler_GetUser (0.00s)
PASS
coverage: 42.2% of statements
ok      github.com/keycloud/keycloud/server    0.352s
```




Thank you