

BY ONETOUCHNEXTGEN

SAUF-O-MAT



AGENDA



Vision



Technologies



Project
Management



Architecture



Automation



Testing



Demo

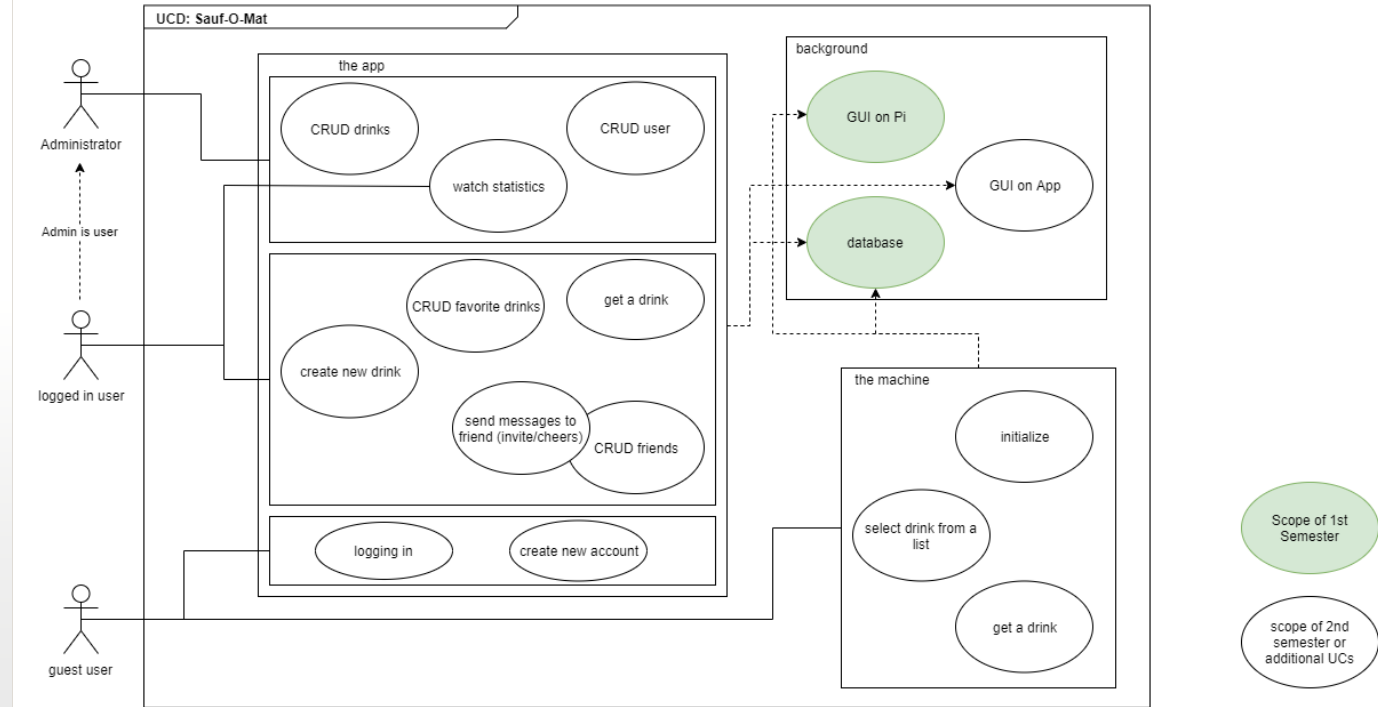
VISION



MOTIVATION

- Get cocktail by one touch (or click)
- Get people together
- Get customized drinks
- See friends activities

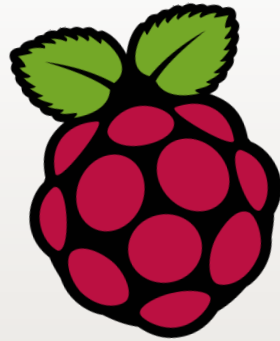
HOW SAUF-O-MAT WORKS



TECHNOLOGIES



MACHINE



- Wooden case
- Pumps via GPIO
- RaspberryPi 4
- Visual Studio Code
- Python





APP

- Visual Studio
- Xamarin → Android and iOS
- C#



BACKGROUND

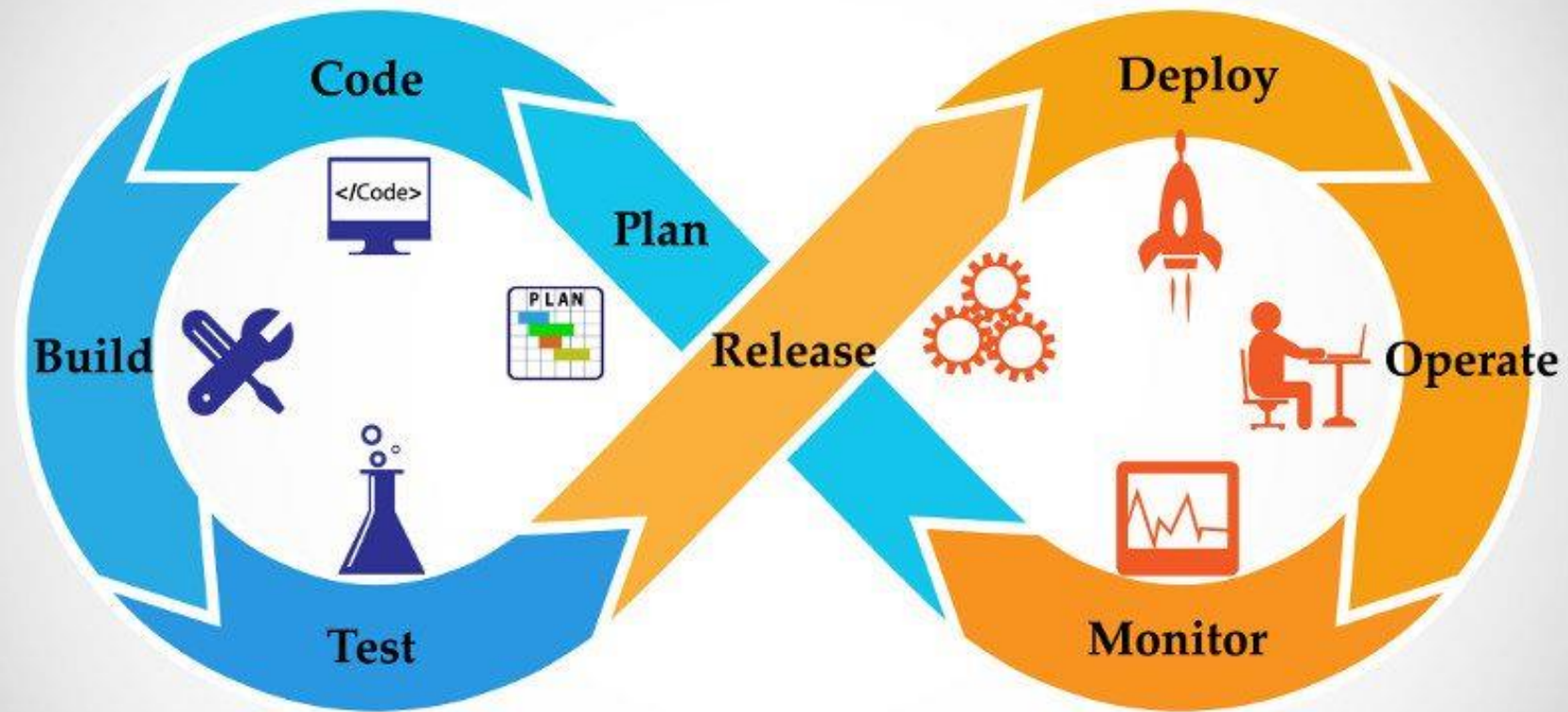
- Windows Server
- SQL database
- Cucumber testing



PROJECT MANAGEMENT



AGILE ENGINEERING



SCRUM

- Agile engineering
- Weekly sprints
- Using YouTrack for tracking

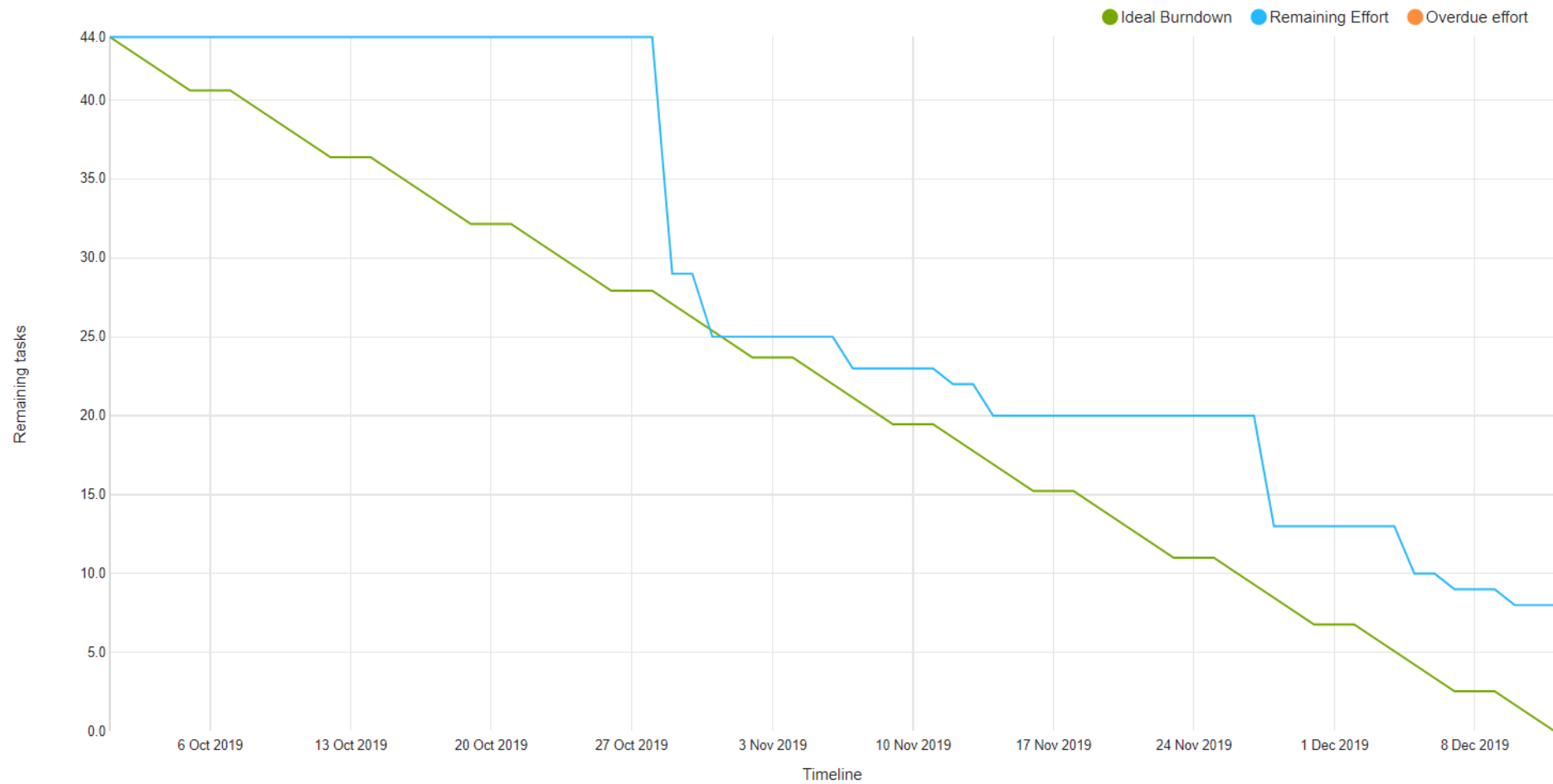


YOUTRACK

- Issue tracking system
- Project management software
- Time tracking
- Assign to workflow, sprint and teammember



BURNDOWN



ISSUE LIST (LATEST ISSUES)

Issues		Time estimated	Time spent
Total time		60h 05m	71h 40m
OTNG-33	hello world demo	00m	6h 00m
OTNG-34	class diagram	4h 00m	30m
OTNG-35	wk8 blog entry	30m	10m
OTNG-36	wk8 answer comments	15m	10m
OTNG-37	wk8 write comments	30m	30m
OTNG-38	weitere use cases	4h 00m	6h 00m
OTNG-39	Pi Zusammenbauen	4h 00m	4h 00m

Issues		Time estimated	Time spent
OTNG-40	feature file test	1h 00m	5h 00m
OTNG-41	mvc	1h 00m	1h 00m
OTNG-42	blogpost wk9	30m	30m
OTNG-43	write comments wk 9	30m	30m
OTNG-44	answer comments wk 9	15m	05m
OTNG-45	Revamp Server and Database	3h 00m	3h 00m
OTNG-46	Midterm Presentation	3h 00m	3h 00m
OTNG-47	UseCases on Pi	20h 00m	16h 00m

ARCHITECTURE

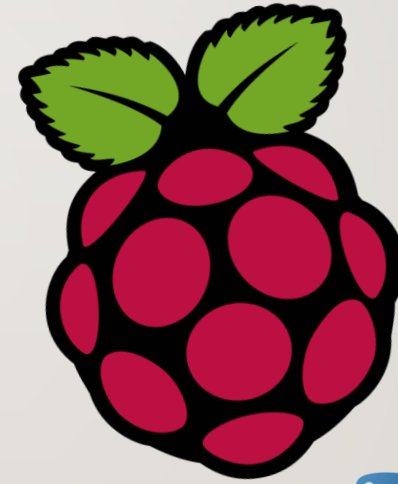


MACHINE

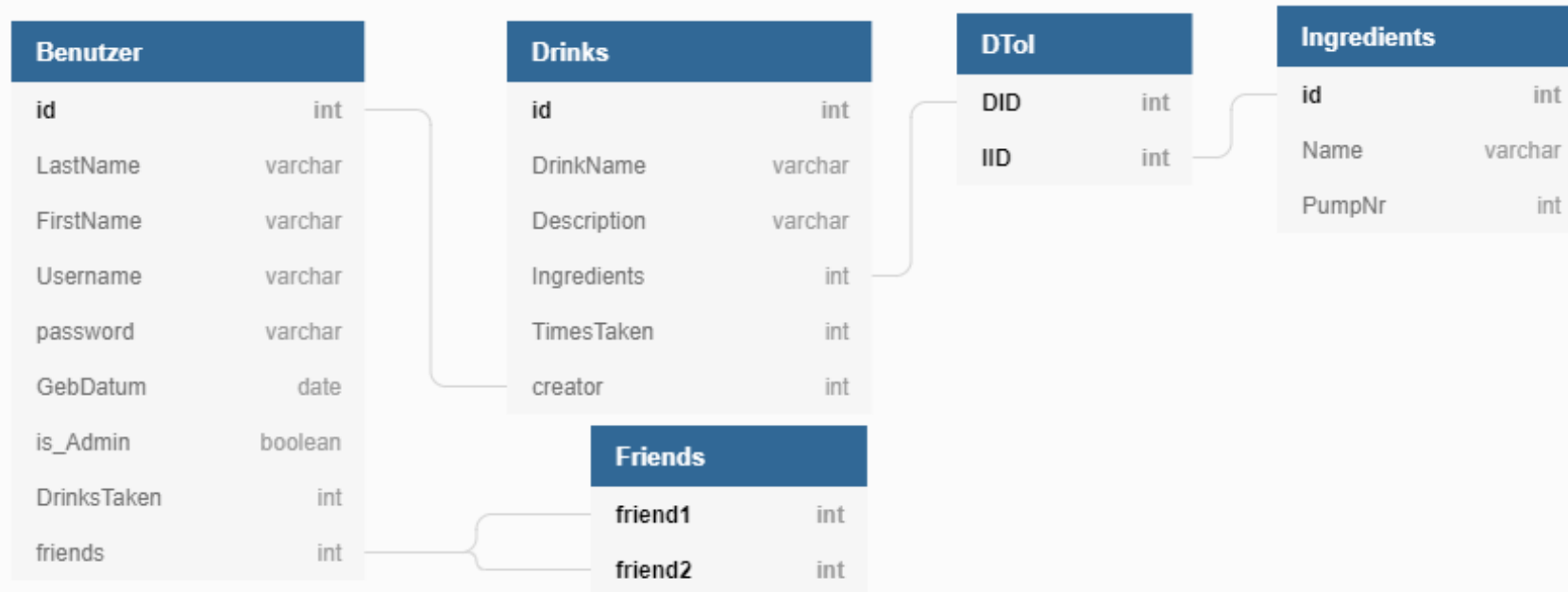
Python on RaspberryPi

- no classes
- no mvc-architecture

Pumps via GPIO → Relais board etc.



DATABASE



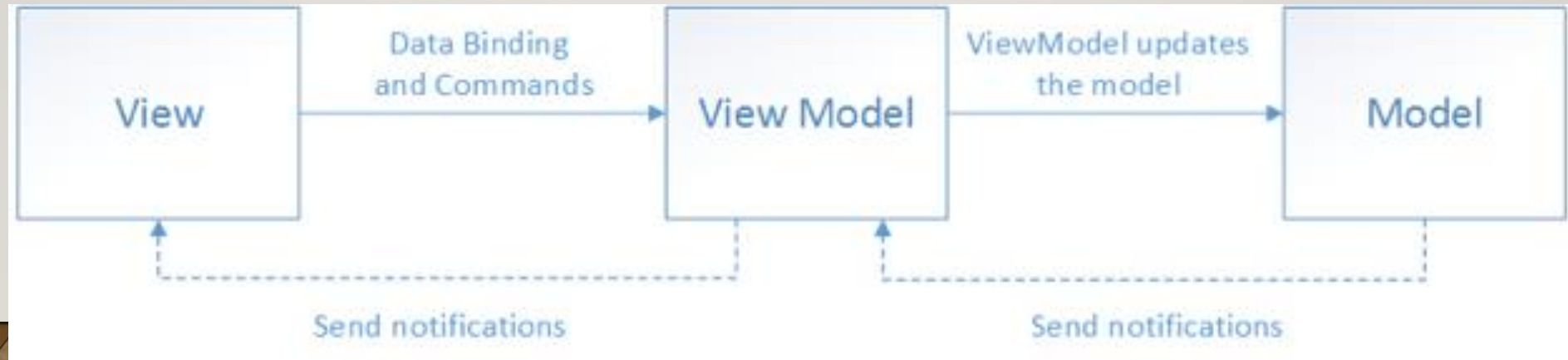
APP

Implemented in C# with Xamarin



→ Class diagram coming next semester

→ Mvvm-architecture coming next semester



AUTOMATION



AUTOMATION

- Designing a GUI with Drag&Drop with Pygubu and tkinter for Python
- Testing with selenium, cucumber
- Reports with YouTrack
- IDE connected to GitHub



TESTING





TESTING WITH FEATURE-FILES



```
1 Feature: testFeature
2
3
4 @mytag
5 Scenario: Links
6     Given the OneTouchNextGen blog site is open
7     When I click on the custom link labeled "Blog Feed"
8     Then the page title should contain "Week"
```





VIDEO



Visual Studio interface showing a Cucumber test run. The main editor displays a Gherkin feature file:

```
1 Feature: testFeature
2
3
4 @mytag
5 Scenario: Links
6   Given the OneTouchNextGen blog site is open
7   When
8   Then
```

The Test Explorer window shows the test results:

Test	Dauer
Cucumber_Test (1)	
Test (2)	32 Sek.
Test (2)	32 Sek.
SpecRun Evaluation (1)	12 Sek.
testFeature (1)	20 Sek.
Links	20 Sek.

The Test Explorer details pane shows the following information:

- Links in testFeature
- Quelle: [test.feature](#) Zeile 5
- Dauer: 20 Sek.
- [Für dieses Ergebnis zusätzliche Ausgabe öffnen](#)

The bottom status bar indicates "Keine Probleme gefunden" (No problems found).



TIME FOR A DEMO



THANK YOU FOR
YOUR ATTENTION!

ANY QUESTIONS?

