



Application Development for Mobile and Ubiquitous Computing

# **First Presentation**

Lukas Klose, Alexander Shulga Dresden, 04th November 2016





# NOTHING TO DO IN YOUR FREE TIME?





# NOTHING TO DO IN YOUR FREE TIME?

# NOT ENOUGH COURSES AT YOUR LOCAL UNIVERSITY?











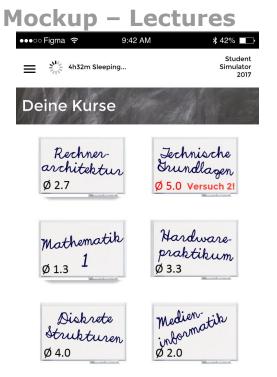
# **Application scenario - Student Simulator 2017**

- Your own virtual student
- Study in ways you never could before
- Manage your resources carefully
- Play the game the way you like it
  - Best marks
  - Most money
  - Fastest degree









Wähle ein Fach aus um für dieses zu lernen. Sobald du denkst, in einem Fach die Prüfung schreiben zu können,, tippe im Untermenü des Fachs auf "Prüfung ablegen". Bedenke, dass es bei deiner Endnote immer einegewisse Varianz gibt! Je kurzfristiger du lernst, desto größer ist die Varianz! Sobald du alle Prüfungen abgelegt hast, kannst du in das nächste Gemeter förterberbline. Dach abei immer dname i Leibhauwide er



- Prepare for exams
- Choose your focus
- Time limit
- Pass all exams to proceed

- Top bar
  - Your current activity
  - Bottom bar
    Your statu
    - Your status





#### Mockup – Learning

- Choose how to learn for you exam
- Shorter = better



#### Future plans

 Studying with friends grants bonus





#### **Mockup – Finances**

- Manage your money
- Different approaches to get money
- Taking a risk might be worth it if in desperate need







#### **Mockup – Your Profile**

- Detailed status
- All informations and statistics about you
- Go to sleep

●●●○○ Figma 🗢 9:4	2 AM 🗱 42% 🔲		
4h32m Sleeping	Student Simulator 2017		
Das bist du	A.		
u a	ser_42 Name ändern		
$\bigcirc \bigcirc \bigcirc$	E-Mail Adresse hinzufügen		
	itglied seit: 29.10.2015		
Bild ändern			
Statusbericht	Schlafen gehen		
Finanzübersicht Guthaben: 420.42€			
Einnahmen der letzten Woche: 100,50€ Ausgaben der letzen Woche: 93,60€			
Gesundheit: 73/100			
Konzentration: 94/100			
Weitere Statistiken			
Gestartete Aktivitäten Stunden geschlafen Prüfungen bestanden Notendurchschnitt Studiumsdauer Freunde	: 63 : 0 : 2,5 : 1 Jahr 0 Monate 6 Tage		

## • Change your profile

• Complete registration





#### **Mockup – Scoreboards**



1.	User	Notenschnitt
	user_1	Ø 1.00
	Gandalf	Ø 1.02
	Hairy Potter	Ø 1.03
	Barney	Ø 1.12
	Petter Griffin	Ø 1.12
	Francis Underwood	Ø 1.13
	user_42	Ø 1.15
	babyBigfoot	Ø 1.21
	. A_non_charged_battery	Ø 1.25
	Your worst nightmar	Ø 1.29
	. Grandma	Ø 1.29
	. Mr. Spoon	Ø 1.30
	. BigfootHunter	Ø 1.35
	. Angelo Maerte	Ø 1.38
	. dr_Hölldöblër	Ø 1.39
	. mamaBigfoot	Ø 1.41
	. 1337_gamer	Ø 1.45
	. hardcorepunk13	Ø 1.46
	). sweet_pepper123	Ø 1.48
	. Dr. Cox	Ø 1.49
22	2. Rick Grimes	Ø 1.52
23	5. testnick44	Ø 1.56
24	i. kappa	Ø 1.60
25	5. ScaryNightwolf	Ø 1.61
26	5. HomerSimpson	Ø 1.61
27	. uncleBigfoot	Ø 1.62
	B. MrBurns	Ø 1.65
20	Render	M166

Highscore (Note)

2 Gesundheit: Konzentration:

- Many ways to compare yourself to others
- Encourage playing in different styles
- Adding new scoreboards to highlight new game features

Folie 10





#### **Future plans**

### Items

- Faster learning
- More money
- Better marks

# Friends

- Bonus while playing with friends
- Special leaderboards

### Many more...

- Refine and balance existing features
  - More courses of studies
- Eating
- Partying
- • • •





# Challenges

- Offline challenge
  - Evolve your student offline
  - Sync data with server if possible







# Challenges

- Usability challenge
  - Proper format on iPhone and iPad
  - Usable on all iPhone devices







## **Technologies**

- Github for version control
- Figma for mockups
- Xcode IDE
- Swift
- Webserver with a relational DB





Í,

Figma



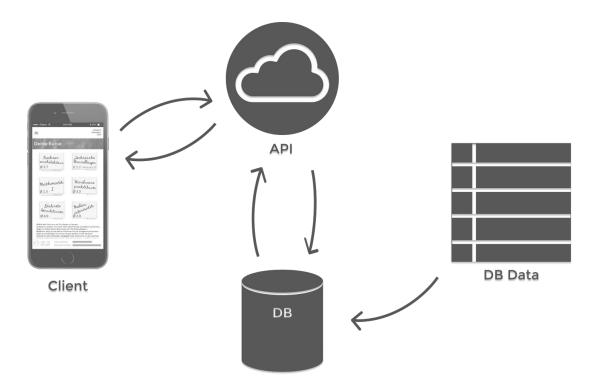
Xcode







#### Architecture







#### **Work Plan**

- November
  - GUI prototype
  - Frontend implementation
  - Construct server and database
- December
  - Backend implementation
  - Connect client and server
- January
  - Testing and bug fixes
  - Optimization





