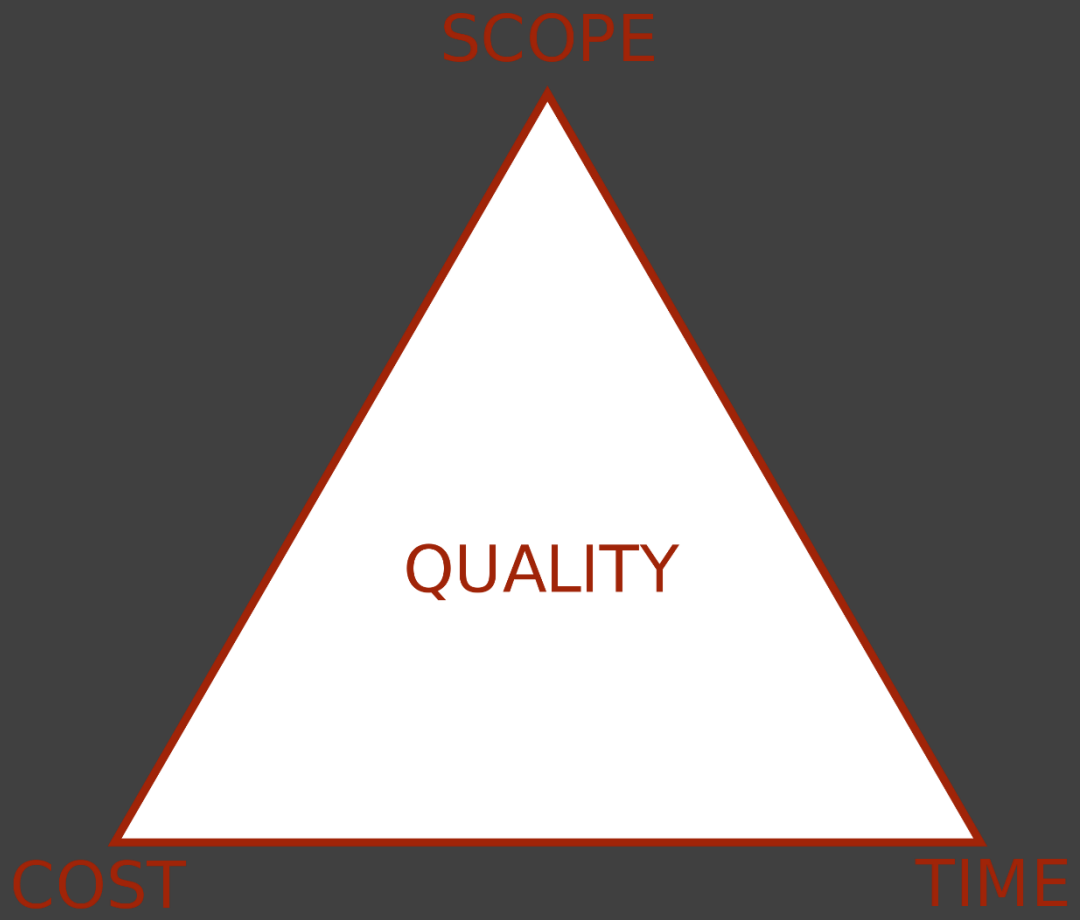
zirkus-empathico.de

Milestone 2

The Project-Management Triangle



Our Project

- Fixed constraints: time, budget (people)
- Flexible constraint: scope

- Our Problem: loss of budget (people) → loss of time

- Solution: change scope
  - No updating the buildchain, no extra character
  - Focus on profile + adaptive training
  - Avoid complexity

Goals for milestone 2

- Be ready for implementation:
  - Use-cases for Login/Register
  - Activity Diagrams for interactions
  - UI Mockups
  - Database design
  - finished theory for adaptive training
  - List of needed functions with short description
  - Time-table for milestone 3

Usecases

One moment please (external PDF file)

Activity diagrams

One moment please (external PDF file)

Mockups

One moment please (external images)

Database

- Basetable

emailAddress (unique)	emailConfirmed	hashedPassword	gamesPlayed
User.name1@mail.net	true	=)dDp8Bad”D3%	8

- Corellation table
  - correlation between user emailAddress and device ID (heruko)
  - multiple users on one device / one user using multiple devices is possible

DeviceID	emailAddress
2abd37-2ff3-6a3c-5c321f	user.name1@mail.net
1f3f32-6ac4-7c01-02b383	user.name2@mail.net
2f3312-4fe3-1231-6cbd32	user.name1@mail.net

Database

- Score tables
  - every entry represents a change with a timestamp
  - designed to track changes of scores over time
  - can be used to plot user progress

Same for every table			Score columns			
Entry-ID (unique)	**emailAddr**	**Timestamp**	**ELO**	**K-Value**	**Sad**	**...**
1	user.name1@mail.net	1559974650	1759		789	
2	user.name2@mail.net	1559974880	859			510
3	user.name1@mail.net	1559976356	1785	0.8		

Theory for adaptive training

List of functions to implement

- **createUser**(String emailAddr, String Password): *boolean success*
- **deleteUser**(String emailAddr, String Password): *boolean success*
- **hashPassword**(String Password): *String hashedPassword*
- **verifyPassword**(String emailAddr, String Password): *boolean success*
- **retrieveData**(String emailAddr): *jsonObject DBdata*
- **pushData**(jsonObject DBdata): *boolean success*
- **logoutUser**( ): *boolean success*
- **getCurrentUser**( ): *String emailAddr*
- **getDeviceID**( ): *String deviceID*
- **correlateDevice**(String emailAddr, String deviceID): *boolean success*

List of functions to implement

- **chooseEmotion**(): *An emotion E based on weighted probability with respect to the order of their scores, Emotion Score of Emotion*
  - **getEmotionScores**(): *Unsorted List/Array L with emotion scores*
  - **sortEmotionAscend**(list of emotion scores) : *Sorted List/Array L*
  - **getSemirandomEmotions**(List L)
- **GenerateTask**(Emotion E, Emotion Score of E)
  - **getUserScore**(): *UserScore*
  - **getMedia**(): *MediaFile*
  - **getBaseSuccessRate**(User Score): *BaseSuccessRate*
  - **getExpectedSuccessRate**(Emotion Score): *ExpectedSuccessRate*
  - **determineNumberOfChoice**(baseSuccessRate): *NumberOfChoice*
  - **determineTimeConstraint**(NumberOfChoice,baseSuccessRate): *TimeConstraint*

List of functions to implement

- **ComputeNewScores**(Emotion, EmotionScore, gamesPlayed, ExpectedSuccessRate): *return newScores*
  - **computeK**(gamesPlayed): *return k-value*

Goals for milestone 3

- Finished implementation (incl. Tests)
  - Functional prototype
- Documentation
- Celebrate (a little)

Roadmap (Implementation Tasks)

- week 1
  - Profile backend - Daniel, Björn
  - Profile frontend - Jovan, Björn
  - Score calculation - Dan, Leo
  - Emotion choice - Dan, Leo
- week 2
  - Task-generation - Dan, Leo
  - UI for time-constraint - Jovan, Björn
  - Testing profile implementation - Daniel
- week 3
  - Time buffer
  - Testing - everybody
  - Documentation - everybody
  - Prepare presentation - everybody
- Milestone 3 – July 8th