

FALCONS · EE308FZ 软件工程 · 作业三

SPORTS BUDDY

需求分析汇报 Requirements Analysis

校园运动搭子平台 · Sports Buddy

约得到 · 约得好 · 约得准

Falcons (第12组) · SRS V3.1



Want to exercise on campus? Hard to find the right partner



Scattered invitations

Group-chat posts quickly disappear under newer messages, so finding people is down to luck.



Poor fit

Partners differ in time, location or skill level, so a game can feel awkward or not happen at all.



Last-minute no-shows

When someone drops out late, the activity is short of players and everyone else's time is wasted.

Target users: university students · First make one campus truly usable

Note: background research currently uses simulated data; real interviews / surveys will be added before the design is frozen.

Why we build it: buddy up easily, well, precisely

Easily

约得到

Problem solved

Wanting to exercise but no one to go with

How we do it

Create, browse and join activities, turning “want to exercise” into “actually exercising”

Well

约得好

Problem solved

Frequent no-shows and skill mismatch

How we do it

Check-in + mutual reviews + credit score, so reliable people stand out

Precisely

约得准

Problem solved

Tedious filtering, unsure whom to join

How we do it

One-line search + smart matching: activities that fit your time, skill and campus

Make one campus truly usable first, then expand to more universities, clubs and communities

Target users and a typical scenario

Target users: university students

Organizer: posts activities, checks the list, confirms attendance **Participant:** finds, joins, checks in, reviews

Scenario: find a game with one sentence

1

Type one sentence

“Basketball at Qishan campus tonight — beginners OK?”

2

Conditions recognized automatically

Sport: basketball · Campus: Qishan · Level: beginner

3

Get matches and sign up

3 activities found, ranked by match score, one tap to join



P-02 Discovery Home

Deliverables: SRS upgraded from V2.2 to V3.1

48

requirements

M1–M5, with priorities

41

user scenarios

full usage flow covered

12

prototype screens

from login to review

15

domain classes

19 APIs · 20 relations

Core activity flow

Create



Sign up



Check in



Review



**Credit score ·
Matching**

New this time: domain class diagram · 12 prototype screens · requirement–use case–acceptance traceability

Domain class diagram: 15 classes, 20 relations

15 classes

20 relations

19 APIs

Entities

User · Activity · Registration · Review · Sport

Value objects / projections

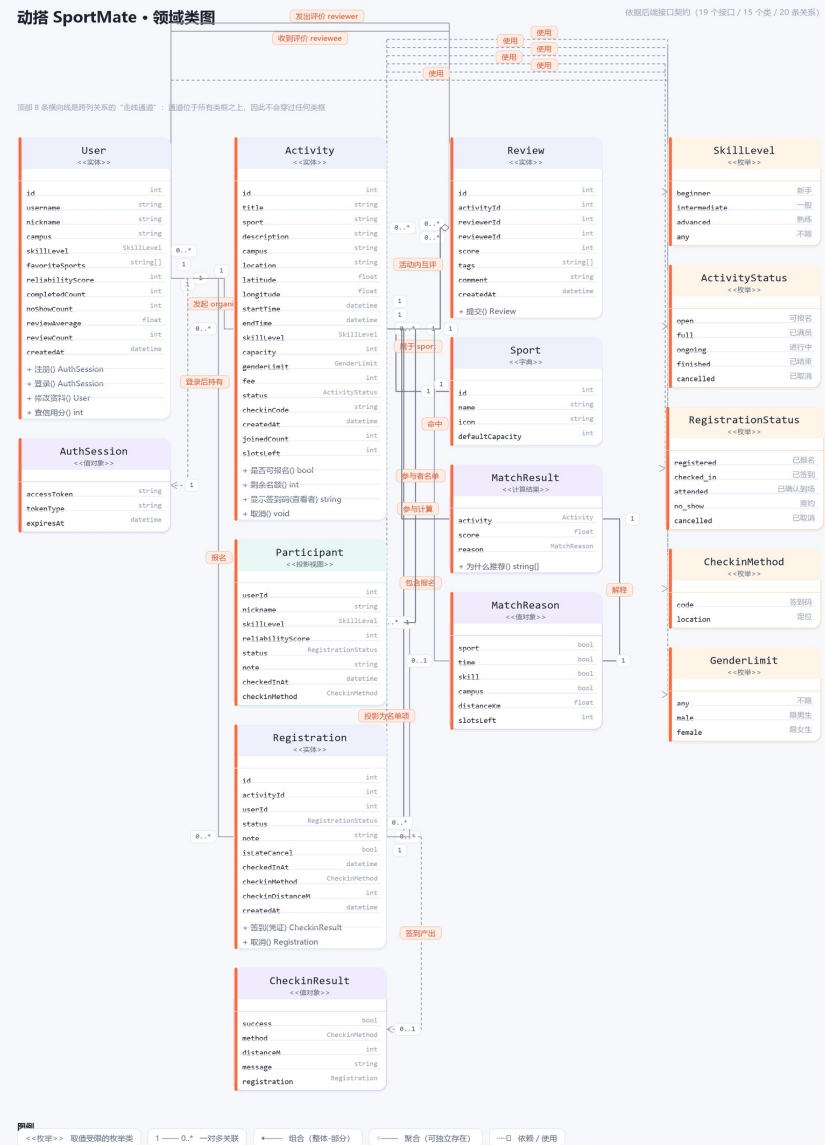
AuthSession · Participant · CheckinResult · MatchReason

● **Computed result**

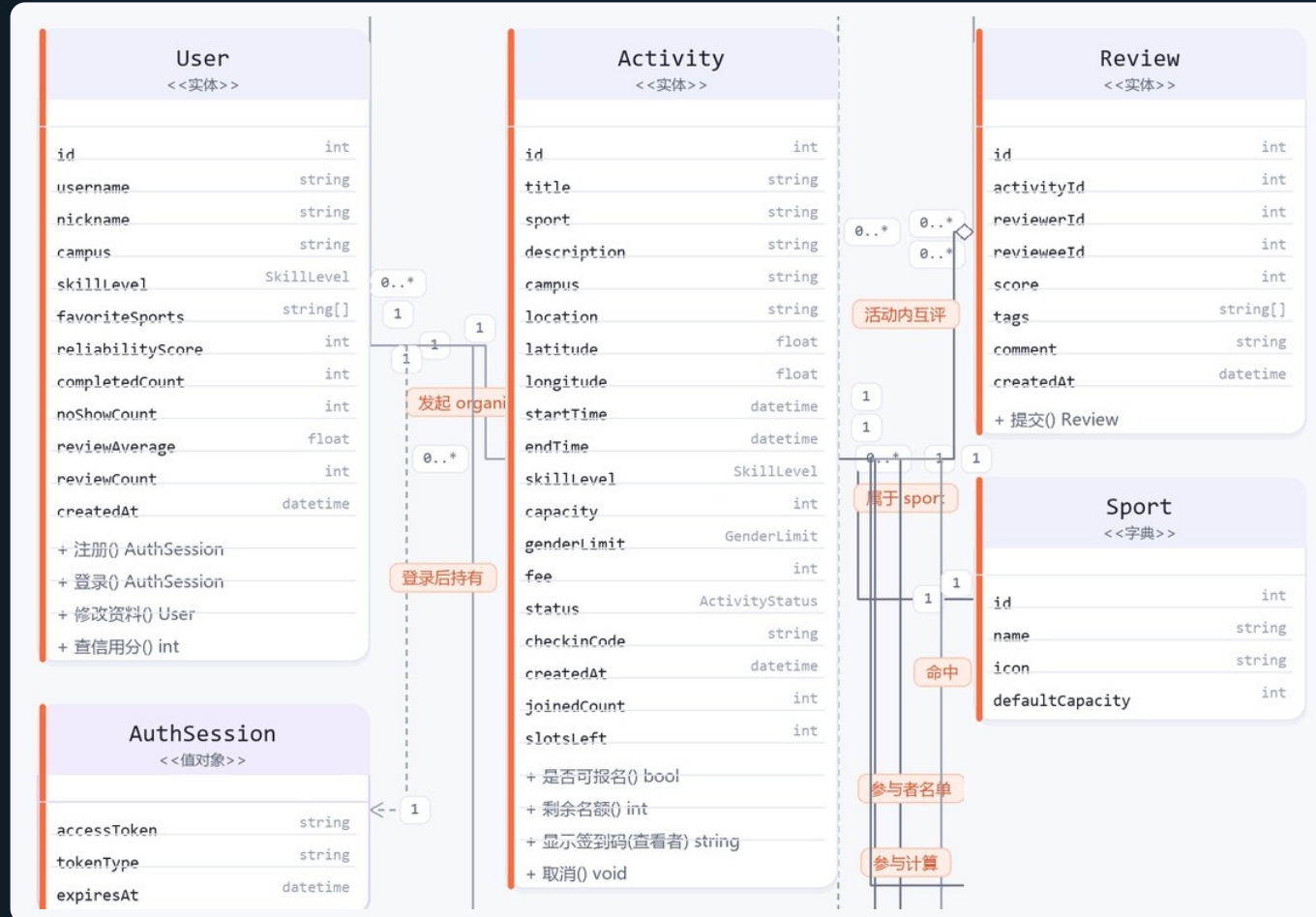
MatchResult (score + reason)

Enumerations

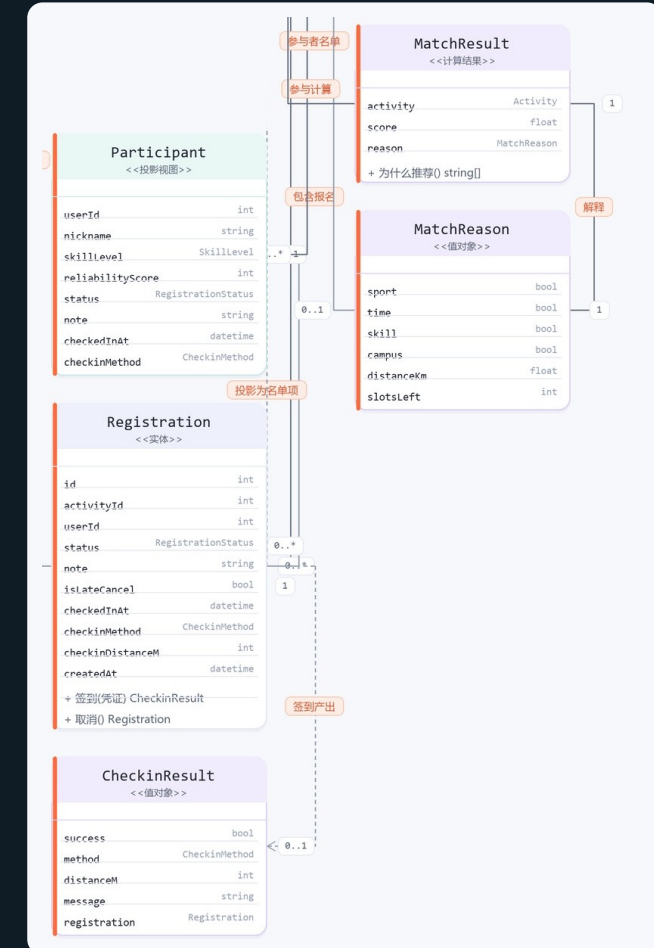
SkillLevel · ActivityStatus · RegistrationStatus · CheckinMethod · GenderLimit



Reading the diagram: core entities, check-in and matching



① **Core entities** User, Activity, Review and Sport are linked by organize / in-activity review / belongs-to; User stores credit score, no-shows and review stats



② **Check-in & matching** Registration produces CheckinResult; MatchResult carries MatchReason

Prototype highlights: discover, check in, review



P-02 Discovery Home

One-line search



P-07 Check-in

Code or location



P-12 Review Partners

Stars + impression tags

12 screens, full user journey

P-01 Login & Register

P-02 Discovery Home

P-03 Activity List

P-04 Activity Detail (Participant)

P-05 Activity Detail (Organizer)

P-06 Create Activity

P-07 Check-in

P-08 Manage Activity

P-09 My Activities

P-10 Me

P-11 Profile (Other User)

P-12 Review Partners

Features and acceptance: rules built into the screens

100 pts

Default credit score

−15 pts

Per no-show

−5 pts

Cancel < 2 h before start

< 60 pts

Cannot join new activities

Feature

Prototype

Acceptance points

Sign up

P-04 Activity Detail

Status turns “Full” automatically at capacity; below 60 pts cannot join; cancel before start, late cancel loses points

Check in

P-07 Check-in

4-digit code or location (within 300 m); clear messages for duplicate, unregistered or cancelled cases

Attendance

P-08 Manage Activity

Organizer ticks who attended; unticked people are marked no-show and lose 15 pts

Review

P-12 Review Partners

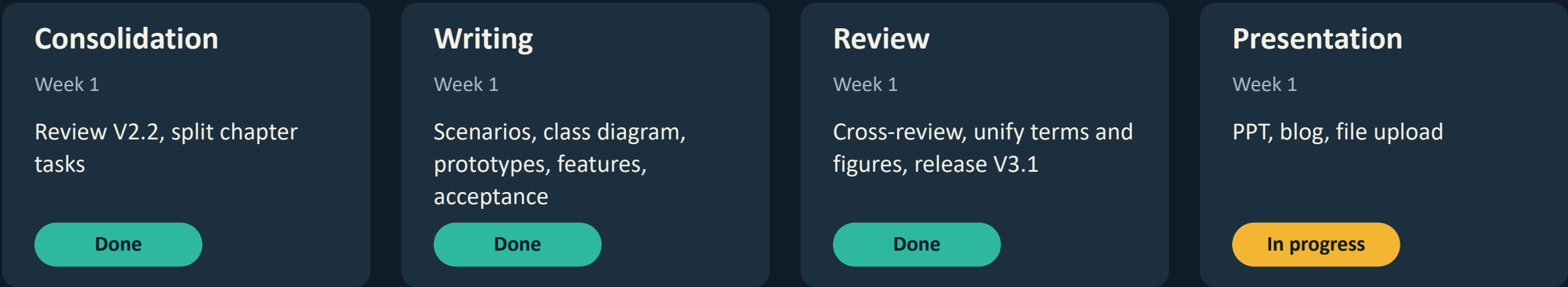
Only confirmed attendees; no self-review; one review per person per activity; within 72 h after the activity

Rules shown in the prototypes; the full requirement–use case–acceptance traceability matrix is in SRS Chapter 7.

Team plan and progress



Assignment 3 progress (one week)



Roles and workload: 13 members, about 7.7% each

13

members · 1 team lead

6

functional groups

7.7%

Estimated share per member,
100% in total; final share adjusted
by performance assessment

Project Mgmt

1

Huang Zhiyuan (Team Lead)

Schedule, risk tracking, blog, final
integration

Product Req.

2

Zhang Zile · Ye Yifan

User research and scenarios, SRS
writing

Frontend

4

Lin Zijun · Li Zhenhao · Li Haoze
· He Jinghao

Interface prototypes, UI
consistency, interaction notes

Backend

4

Zhang Jingtian · Yu Chenghao ·
Zhang Xinyu · Xu Boyu

Class diagram, function
descriptions, acceptance criteria,
Word formatting

Algorithm

1

Cai Yaohua

Matching / reliability modelling,
class-diagram support

Testing

1

Wang Shaojie

Acceptance criteria, SRS
consistency check

Collaboration: one owner, one reviewer



Task allocation

The lead splits the SRS into chapters mapped to the six groups; every task has one owner and one reviewer.



Progress sync

A short online meeting each week; finished items are marked on the task board, blockers raised at once; the lead tracks the critical path.



Document collaboration

Word is the single source of truth and the PDF is exported from it; deliverables live in fixed folders of the shared repository.



Review & integration

Each chapter is reviewed by someone outside its author group; the tester runs a checklist; the lead unifies names and figure numbers.

Workload shares start as an equal estimate, then are adjusted by the team performance assessment

Challenges and solutions

Challenge

Solution

Previous SRS had no class diagram or prototypes



Added a domain class diagram and 12 high-fidelity screens, linked back to requirements

Background research used simulated data



Clearly marked in the document; real interviews / surveys listed to validate before design freeze

Large document, many figures, Word and PDF may drift



Word as single source, PDF exported from it; figure numbers and captions managed in one place

Inconsistent product name (an early temporary name)



Unified as Sports Buddy across SRS, slides and blog

Chapters written by different members are hard to merge



Fixed a chapter template and glossary first, then cross-review and merge by the product group

Next steps

1

Validate needs

Before design freeze

- Run real user interviews and surveys
- Replace simulated research data
- Revise the SRS from feedback

2

Design phase

Oct 19 – Nov 1

- Finalize prototypes
- Architecture and API documents
- Keep class diagram and API contract consistent

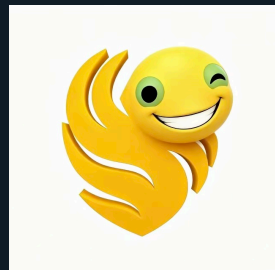
3

Build & test

Nov 2 – Dec 13

- Build and review runnable versions
- Trial with 30–50 students
- Deliver test report and feedback

Goal: make one campus truly usable, then expand to more universities, clubs and communities



谢谢大家

Q & A

Sports Buddy · 约得到，约得好，约得准

SRS V3.1 · 领域类图 · 12 屏原型 · 源码: github.com/Falcons-FZU-MU-SE-GROUP12/SportsBuddy