

Backend views

Frontend

Exercise interactions: Student

- Course
- Packages
- Levels
- Tasks
- Exercise generation
- Answer validation
- User info
- User round data
- Activity log

Frontend views:

Course view

- Get packages
- Get levels for each package

Task view

- Request task for level
- Request exercise for task

Exercise submissions

- count round steps
- collect input
- send to backend
- present results
- ... repeat?

Level summary

- collect stats for level + round

Session data? - round exercise count and other temporary stuff

User interactions / templates:

Course

- Package 1
- Level 1
- Level 2
- Level 3
- (Package 2)

• View list of packages and levels + level progress

Q: word
A: _____

Submit

0 100

(level:)
• Start answering questions

Q: word
A: words OK!
(feedback)

0 100

• View or add new answer, get feedback

80% Next

things to look at: Save?

• View round summary
• proceed to next level

OR
• repeat level with new round if necessary

User activity:

- round #
- task # per round
- Level #
- task

Render

Render

Render

Render

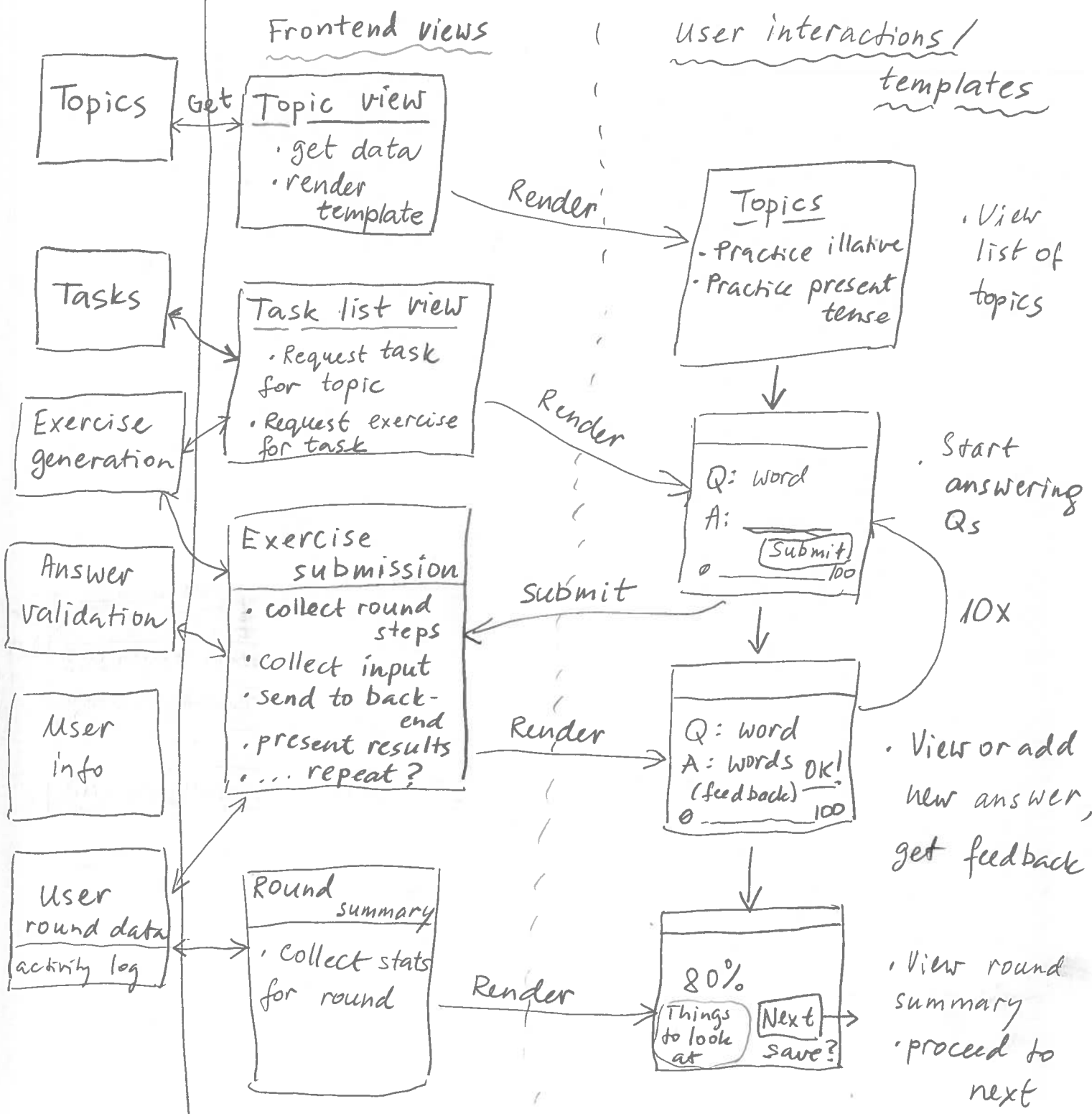
Submit

10x

Get

Backend Views

Frontend Exercise Interactions: Student



outside stuff

Learning packages

Lookup server

analyze CG, etc.

FST + lexicon browser

FST / lexicon views
list, select

Ling. DB

models

User DB

models

semantics, type, exercise type

Task actions

Level views
List by level

Task views
list, add, edit, delete

Package actions

Views
- GET
- POST
- PUT
- DELETE

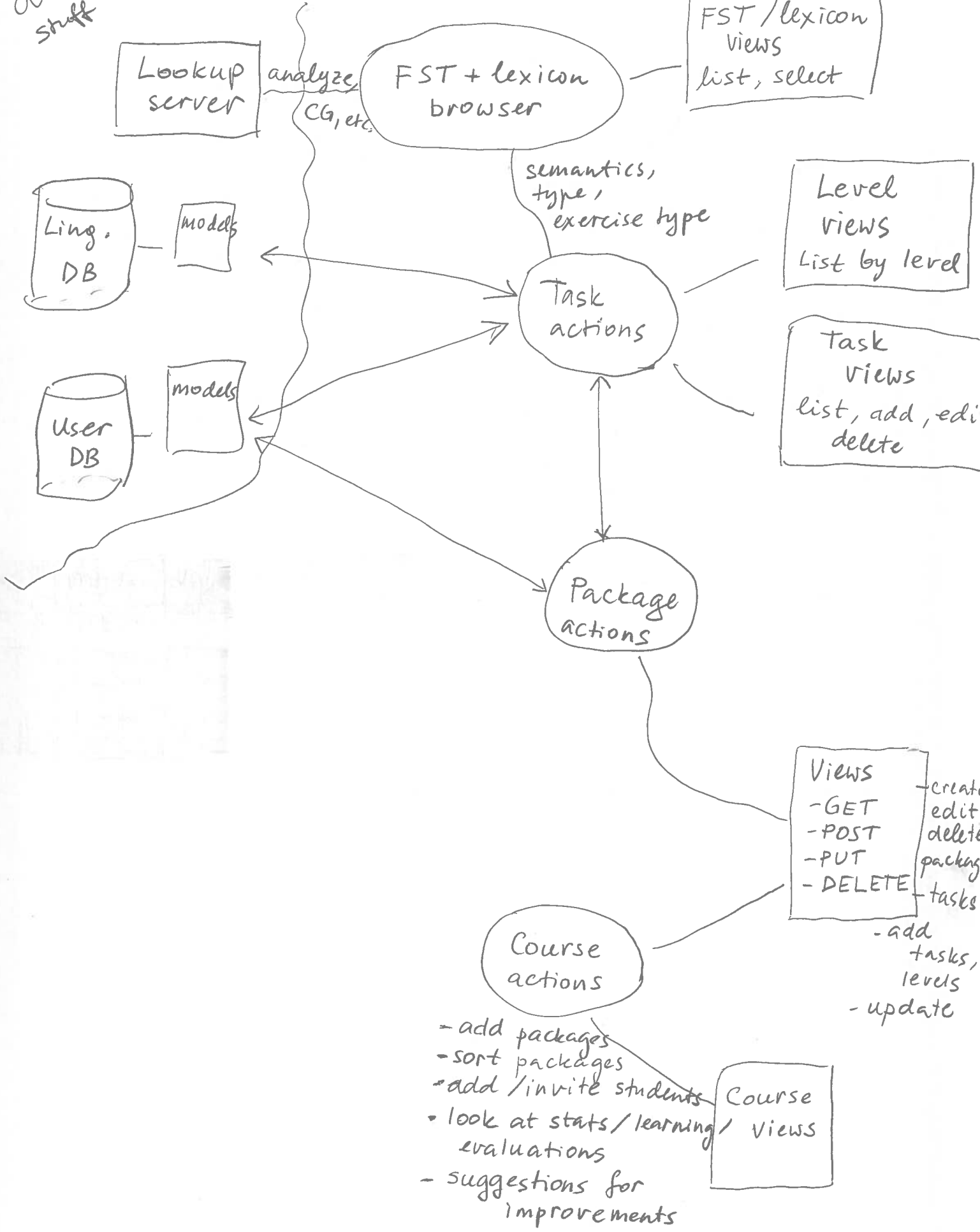
create, edit, delete packages, tasks

- add tasks, levels
- update

Course actions

- add packages
- sort packages
- add / invite students
- look at stats / learning / evaluations
- suggestions for improvements

Course views

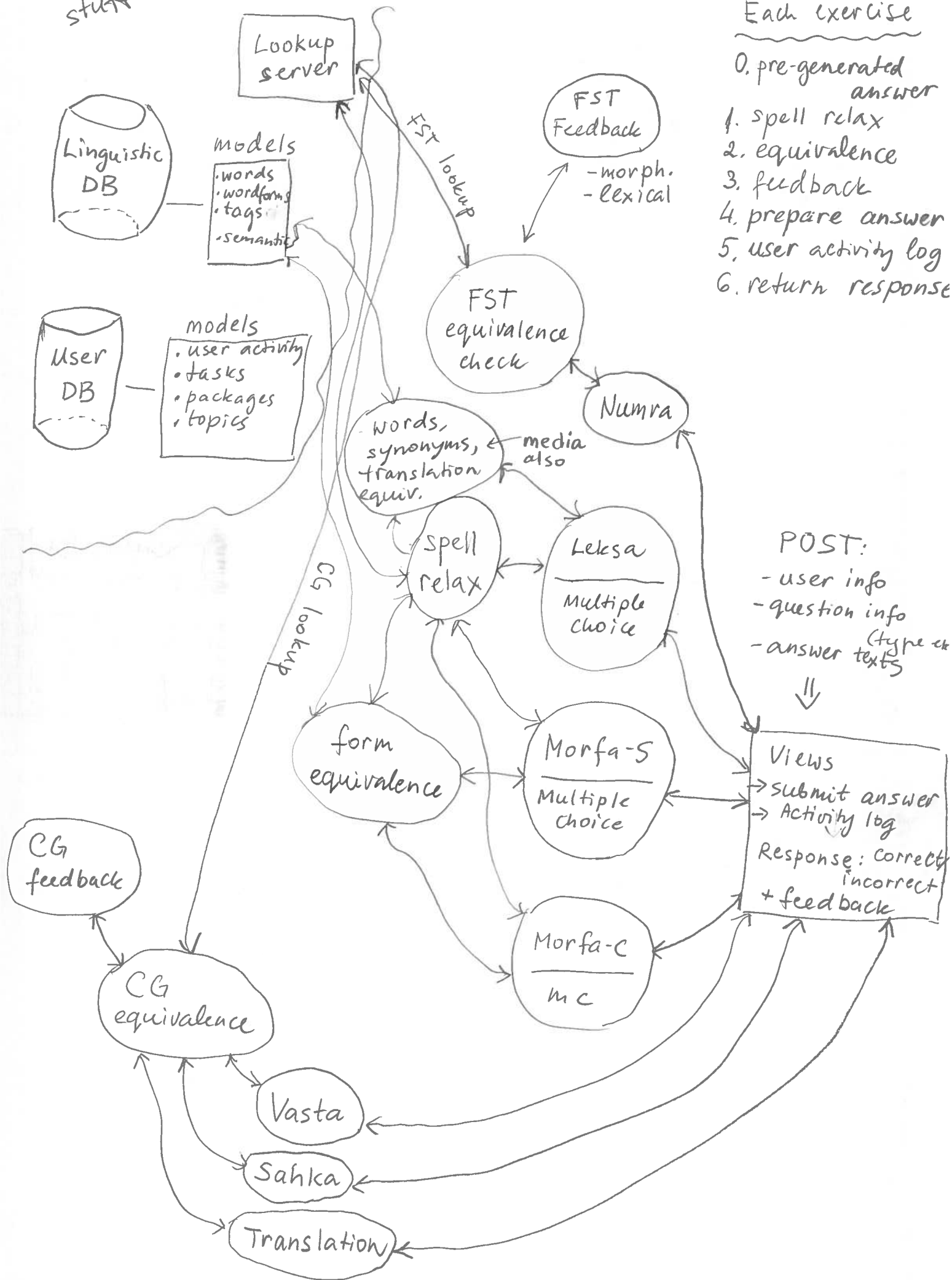


Answer checking (validation)

outside stuff

Each exercise

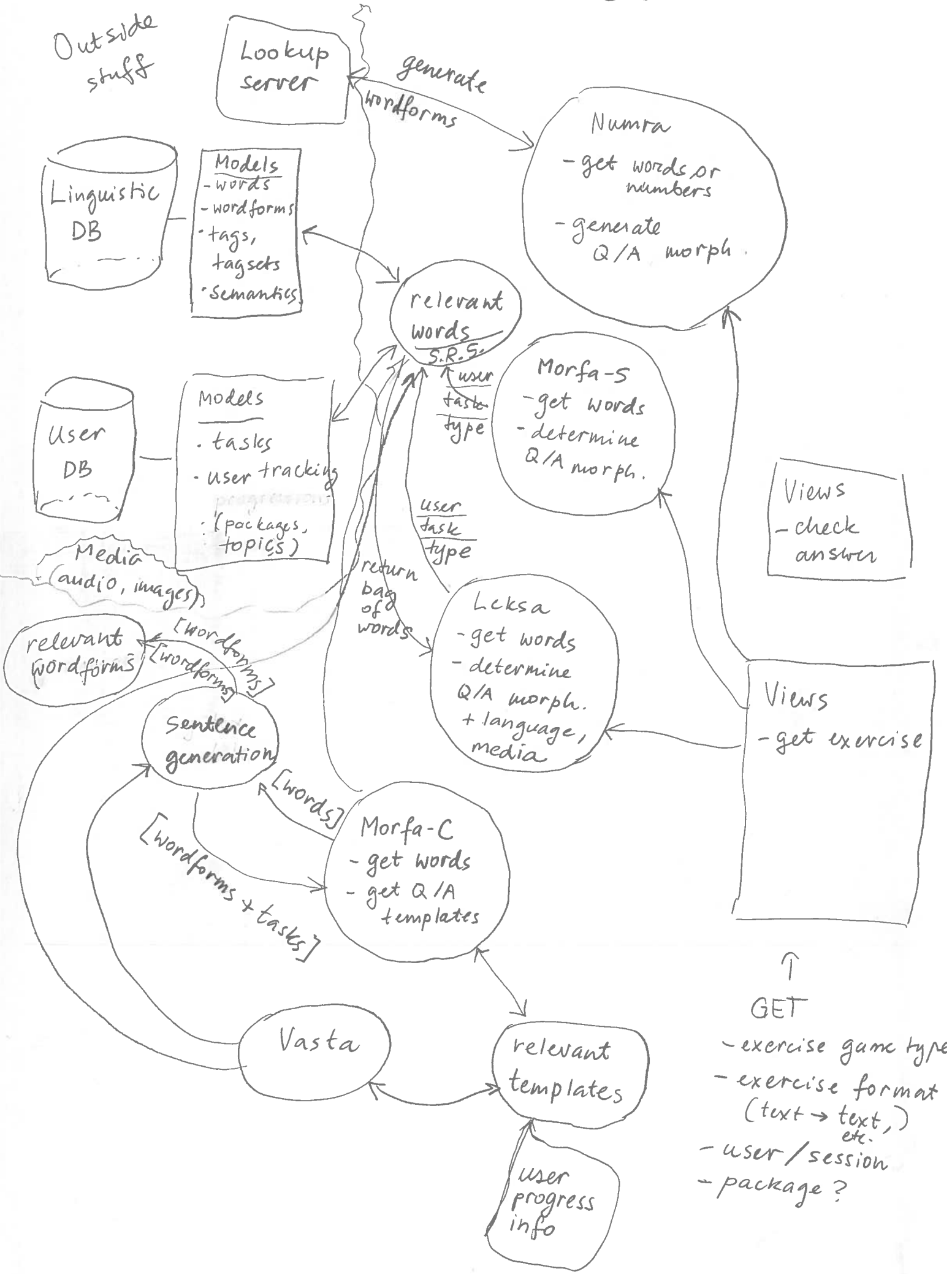
0. pre-generated answer
1. spell relax
2. equivalence
3. feedback
4. prepare answer
5. user activity log
6. return response



POST:
 - user info
 - question info
 - answer texts (type & texts)

Views
 → submit answer
 → Activity log
 Response: Correctly
 incorrect
 + feedback

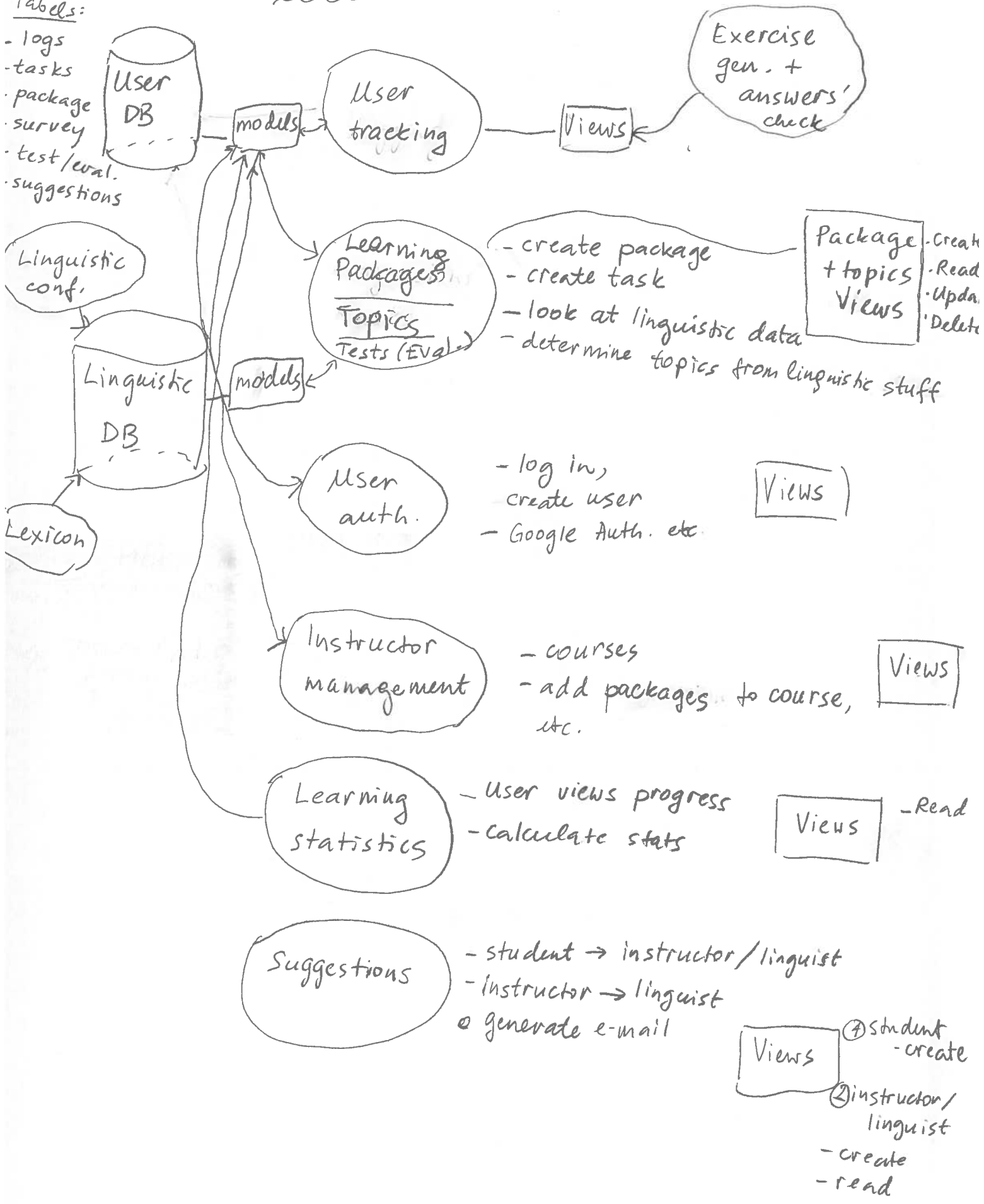
Exercise generation backend



User interaction backend

Tables:

- logs
- tasks
- package
- survey
- test/eval.
- suggestions



Exercise gen. + answers check

Package + topics Views
 - Create
 - Read
 - Update
 - Delete

- create package
 - create task
 - look at linguistic data
 - determine topics from linguistic stuff

- log in,
 - create user
 - Google Auth. etc.

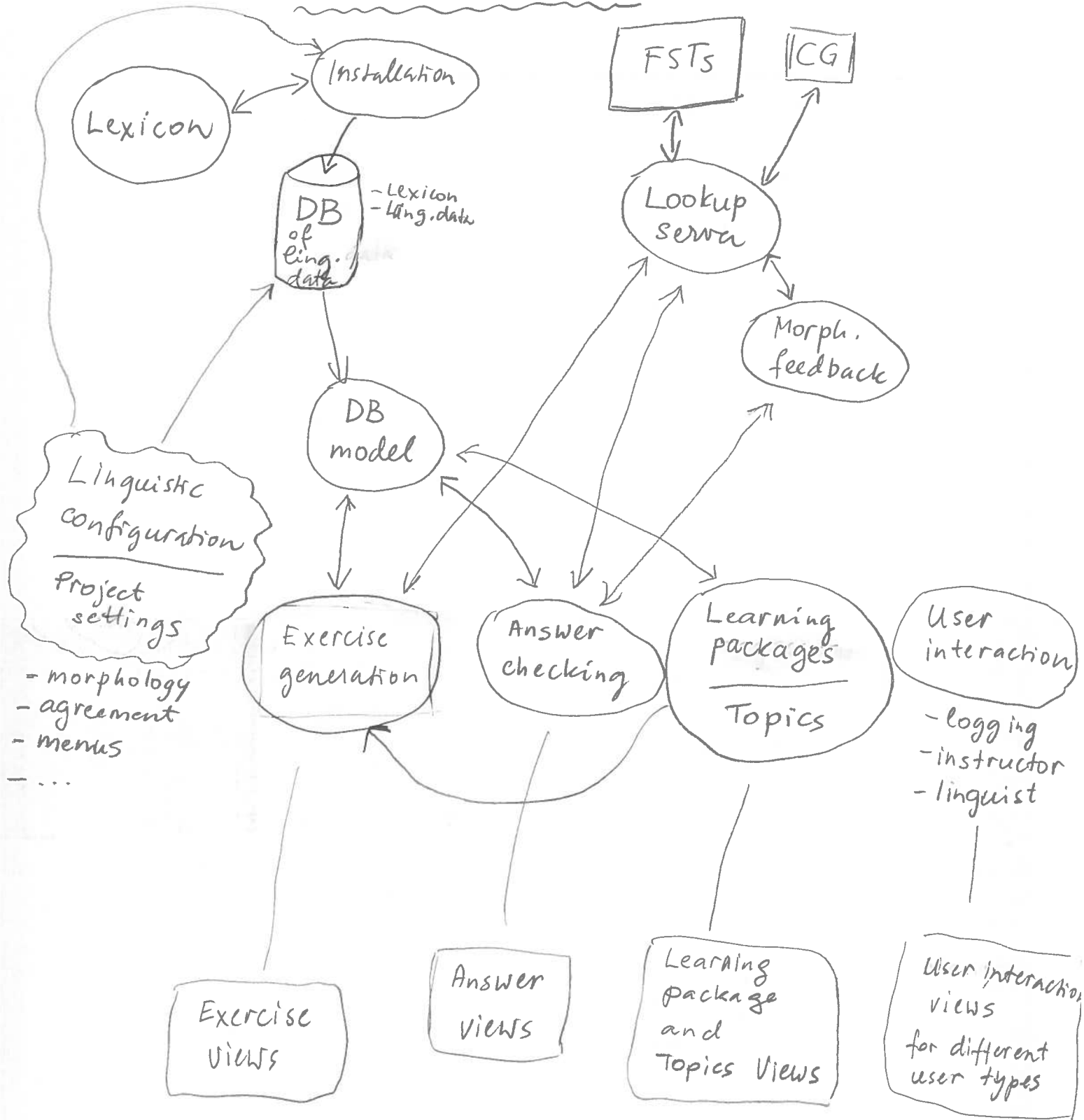
- courses
 - add packages to course, etc.

- user views progress
 - calculate stats

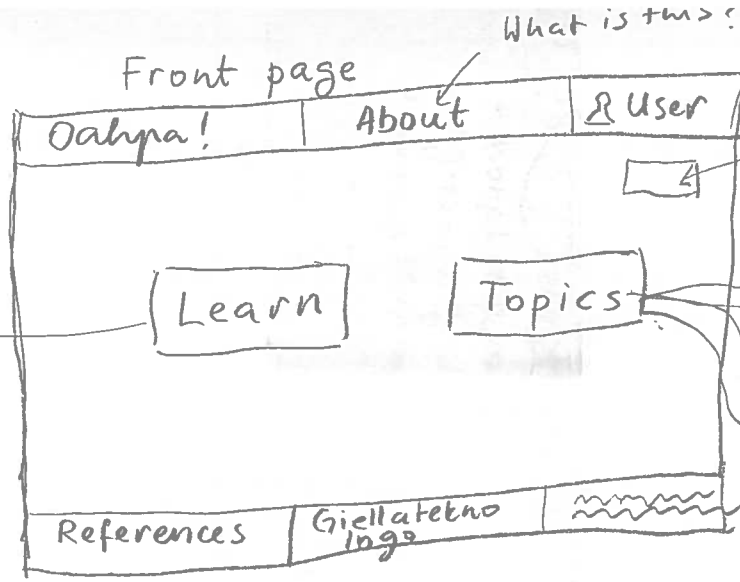
- student → instructor/linguist
 - instructor → linguist
 - generate e-mail

Views
 ① student - create
 ② instructor/linguist
 - create
 - read

Backend overview

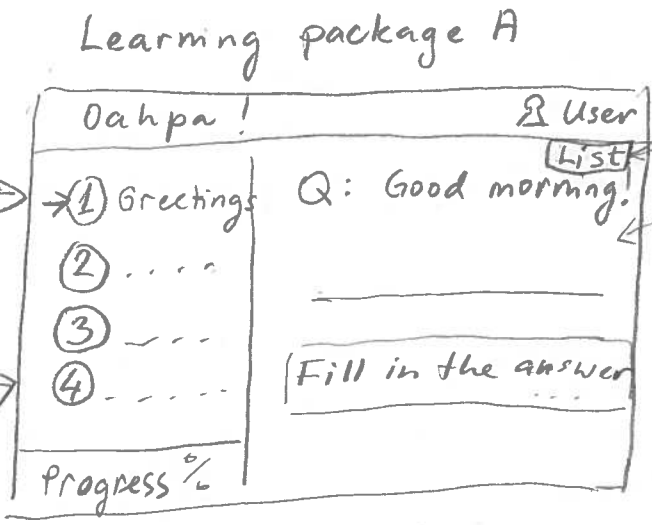
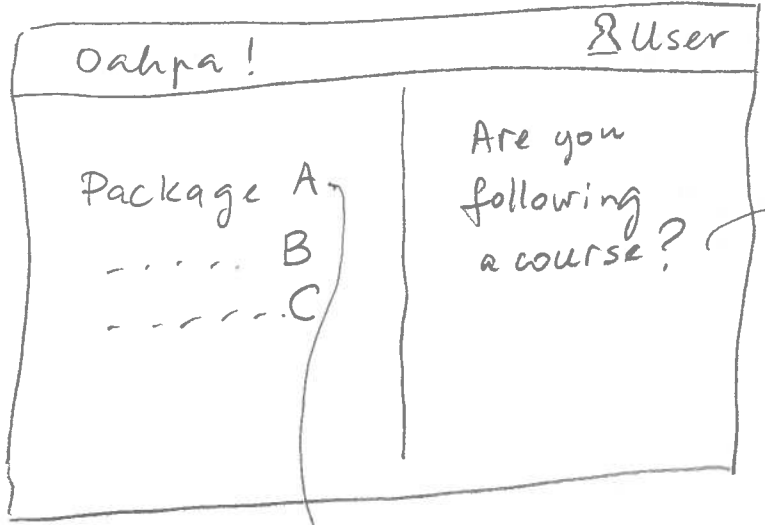


Frontend



Interface language select

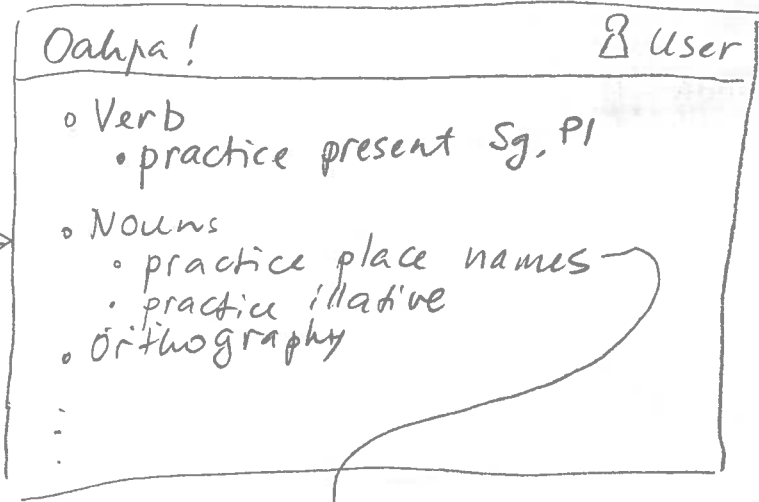
- go to practice place names (inflection, vocabulary)
- go to orthography practice
- go to practice illative



List of words. What I am going to learn in this package?

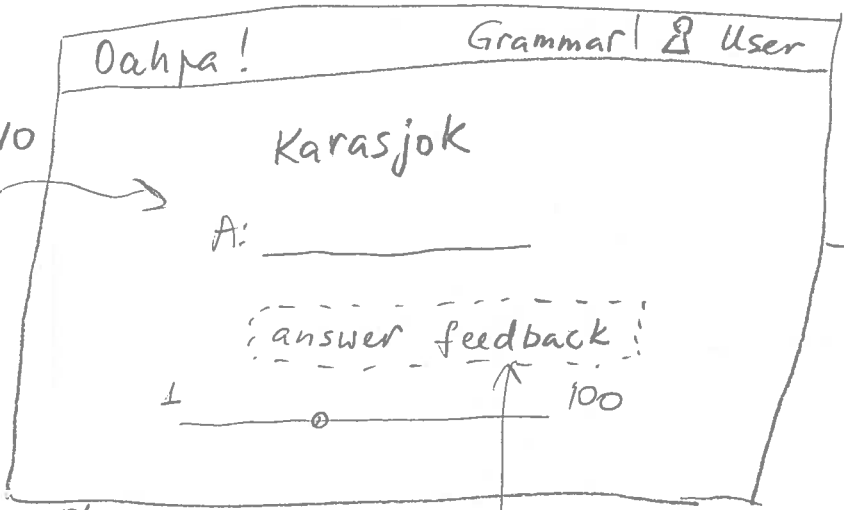
First exercise in package A

Page of Topics



Front page

- Groups of 10 questions one by one
- Mixed exercises
- Conditional buttons (submit, ^{morph.} feedback)



Potentially 3-level feedback

Round complete

