Kedi-net Istanbul

Istanbul Cat Shelter Database

Phase #3

System Modeling and Implementation

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Software Engineering Project
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Goals of my project – from Phase #1

- Help with stray cats in Istanbul
    - All sheltered cats of Istanbul on one website
    - Everyone can find their perfect cat

- SMART goals
    - Database: min. 500 cats & min. 10 shelters
    - Filtering and sorting of cats
    - Min. 2 types of pages
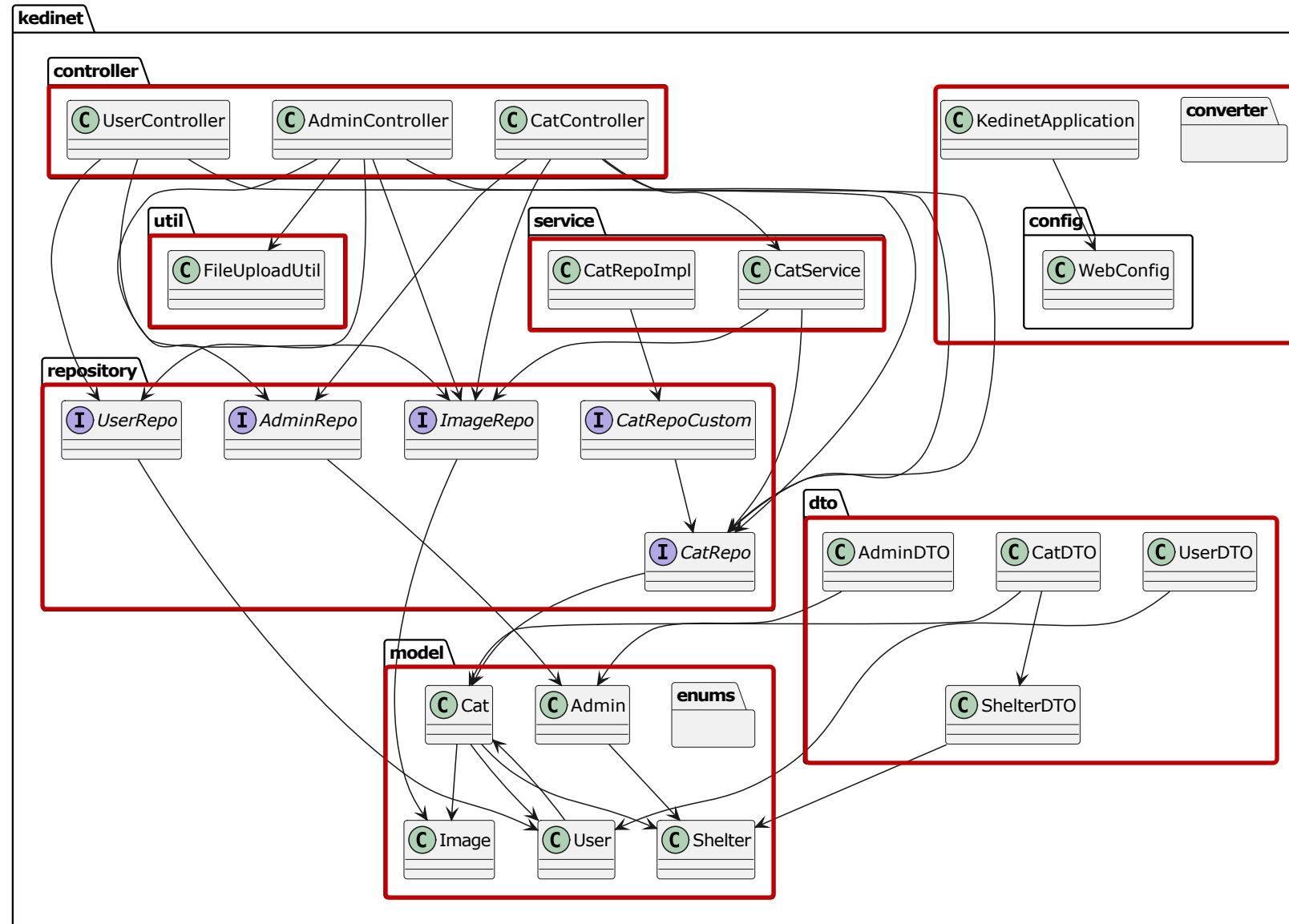   - Responsive, simple and user-friendly website

Goals of my project – Phase #2, #3

- Functional and non-functional requirements

- Well-organised system architecture

- Maintainable and understandable code

- Full-Stack Web Development
  - Frontend: React
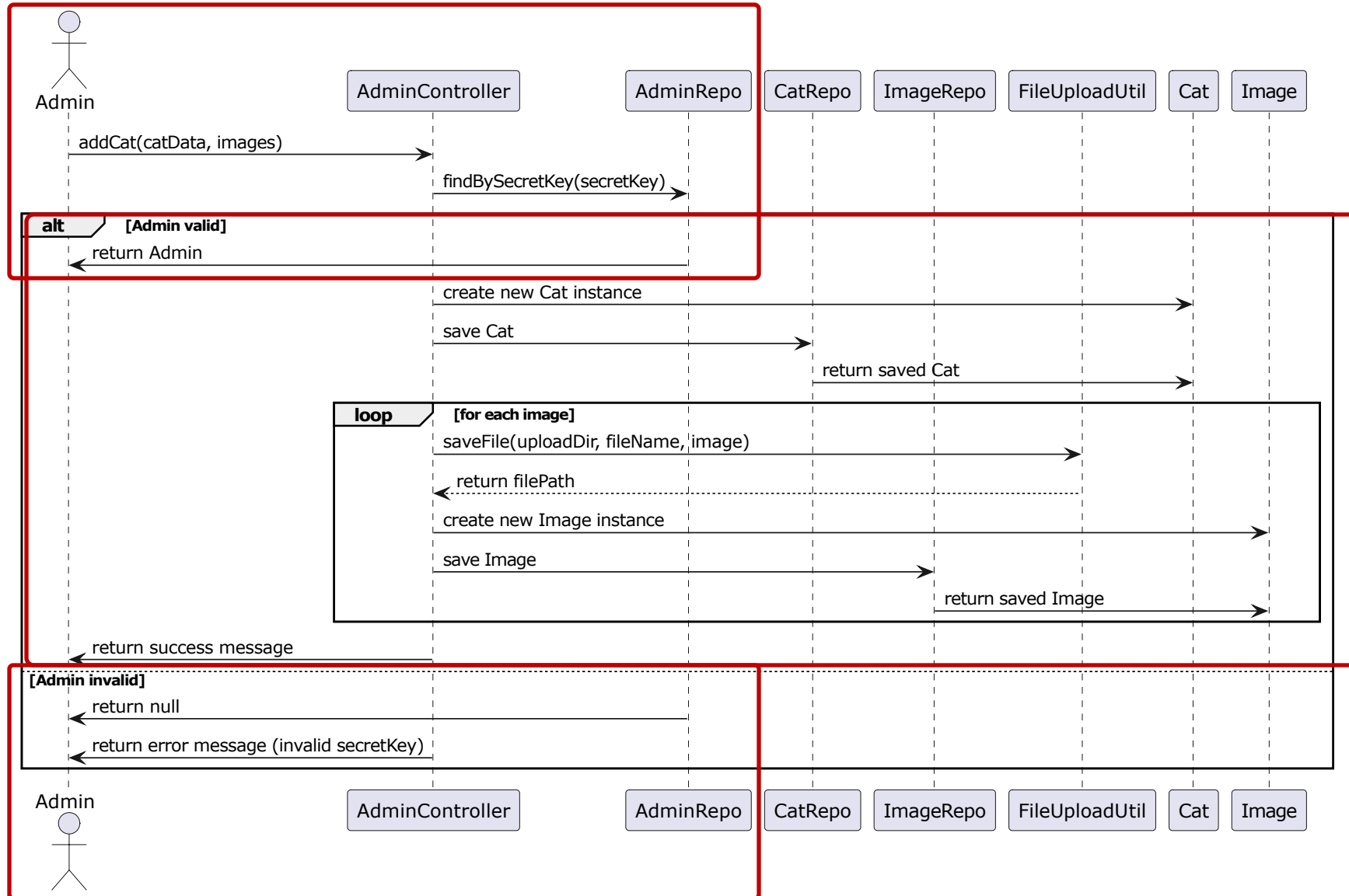 - Backend: Java Spring Boot

Coarse-grained Class Diagram

Add Cat Sequence Diagram

What did I achieve?

- SMART goals ✓
    - Database: min. 500 cats & min. 10 shelters ✓
    - Filtering and sorting of cats ✓
    - Min. 2 types of pages ✓
    - Responsive, simple and user-friendly website ✓

- Functional & non-functional requirements ✓
- Well-organised system architecture ✓
- Maintainable & understandable code ✓

What is the final result?

- Fully functional website

  - Help with stray cats in Istanbul
  - All sheltered cats of Istanbul on one website
  - Everyone can find their perfect cat

  - Admins can perform CRUD services
  - Users can save cats to a favourites list

What didn't I achieve?

- Maintainable database
  - Age → Birthyear

- Security
  - Password in database
  - Secret Key

- "Fancy" features
  - Location distance & map
  - Notifications

Pros of my software

- Quick search

- Many filters

- Sorting option

- Much additional information on cat

- No loading of second page to see all filtering options

- Add cats to a favourites list

Cons of my software

- No search for cats near your location

- User can't see distance to shelter from own location

- Must create user account for adding cats to favourites list

- No notifications on newly added cats

Conclusion and Acknowledgements

- Group work
  - Communication
  - Boundaries

- System Modelling
  - Diagrams
  - PlantUML

- Full-Stack Web Development
  - Frontend: JSX, React
  - Backend: Java Spring Boot, MySQL

References

- Sommerville, I. *Software Engineering*. 10th Edition, Pearson Education Limited, Boston, 2016.