

# Milestone Report 1 (1 April 2019)

The description for the task can be viewed from [here](#)

## 1. Executive Summary

Summary of project status and any changes that are planned for moving forward.

### Moving Forward

- In our last meeting, we decided to change our perspective to issues. Issues will be created after the meeting, so the person who opens issues will add more detailed information to issue's description. The person who opens the issue will be the next person to the person who is writing the meeting notes at that week. We decided this because we were creating issues at the end of the meeting, so they were lack of important information because we were creating so many issues in a few minutes. The responsible person will take care of them and this will help to solve our problem we thought.
- The class and PS content will be analyzed in weekly meetings more thoroughly. So every person in the group will have the same amount of knowledge about what is going on in that week. We decided this because some people felt lack of knowledge about what was going on the project, we thought that this will solve this issue.
- As discussed in the classes, works will be divided into smaller parts after this week. So people can feel more responsible to other group members, generally it will increase the performance of each team member. We did this because when so many people assigned to same work, people did not feel responsible for the work, so some work completed late.
- Issues with dependencies will be given lower priority. For example mockups were depended on scenarios. We will assign more people to scenarios than mockups, so it will finish in shorter time. So the people which are creating mockups will work in reasonable time. We decided this because use case diagram and class diagram spend most of the time of the week so sequence diagram team couldn't start the work which they did. They had very limited time so they put too much effort than other people.

## 2. Deliverables

List and status of deliverables

Maybe a table summing up deliverables?

Deliverable		Created	Is Up To Date
Project Repository			
	Sub element	13.2.2019	✓
			✗
Project Documents			
Issue Management			
Requirements			
Mockups			
Design Documents			

## 3. Evaluation of Deliverables

### 3.1. Project Repo:

### **3.1.1. Burhan:**

3.1.1.1. Resources title in the Sidebar should have its contents as subtitles. Currently you need to click on Resources to access it's contents.

3.1.1.2. Projects of Sequence Diagram and Class Diagram are subtopics of Language Learning platform, not independent projects so they should not have their own project.

## **3.2. Project Documents:**

### **3.2.1. Burhan :**

3.2.1.1. Most of the documents contain a lot typos and grammatical mistakes. Documents should be proofread before being submitted.

3.2.1.2. Assignment names or what they are about should be included in the Sidebar titles. Currently it is not clear what the assignments are and what are the subtitles are about without clicking on the assignment.

## **3.3. Issue Management:**

### **3.3.1. Burhan:**

3.3.1.1. Issue labels are not updated according to progress made. There are issues with "Not Started Yet" tag that are completed and closed.

### **3.3.2. Arda:**

3.3.2.1. Due dates other than weekly milestones are specified in meeting notes, but not in the issues. We specify weekly milestones in issues but there are different due dates for tasks which are prerequisites of each other

## **3.4. Requirements**

### **3.4.1. Ali:**

3.4.1.1. Administration capabilities are so limited. They can/should be explained further, maybe add some more unique actions for this type of user.

3.4.1.2. Overall requirements and glossary part are greatly partitioned and ordered. Nothing is unclear in considerable amount.

## **3.5. Mockups**

### **3.5.1. Ali:**

3.5.1.1. In scenario 1.2 at the last image there may be included an option for seeing which questions are answered correct and which are not.

3.5.1.2. There are some typos and mentions about expert type of user which is overstated that should not exist.

## **3.6. Design Documents**

### **3.6.1. Use Case Diagrams**

3.6.1.1. During the draft state of our use case diagram we had a very detailed use case diagram. It didn't only describe the basic functionalities from the requirements, it also described the details of the features. After getting the feedback, we changed the use case diagram so it described more basic things. I think this version is easier to track and understand. It still can be considered a little too detailed but I think it is better. This way we can see everything in a picture.

3.6.1.2. Our use case diagram will be very helpful during the actual coding of the project. It helps seeing the requirements better. With the help of use case diagram, we can see what is expected from our project in a very easy way. I think it will prevent us from implementing unrequired parts.

### **3.6.2. Class Diagram**

3.6.2.1. There were some mistakes and some points that were missed in the draft of the class diagram. Also, interactions were shown in quite a complicated manner and there were too many classes. A much better class diagram has been created as a result of the corrections that were made in the light of the feedback received. Now the relations between the classes are clear and intelligible. A compacter diagram has been created by reducing the number of classes. Contents of the classes have become adequate owing to the methods that were added.

3.6.2.2. Our class diagram will be very useful for the project implementation part. We will easily see the classes that we will create and their attributes and methods. Naturally, methods in the class diagram will not be sufficient, we will add some other methods and attributes but at this stage our class diagram is enough to understand the general overview of the schematics of our project.

### 3.6.3. Sequence Diagrams

3.6.3.1. First draft of the sequence diagrams were not satisfactory because of the timing problems. We give the most time to use case and then the class diagrams. So the first draft of the sequence diagrams were designed in a very short time. Despite to these facts, first draft of the sequence diagrams were good with respect to given time.

3.6.3.2. After feedbacks came from TAs, and the conversations about sequence diagrams in the class, our team put our best effort to design the sequence diagrams better. The number of diagrams tripled and the quality of the design became significant. Sequence diagrams will be our basis for the further development of our project.

## 4. Work Done by Team Members

Team Member	Effort
İrem Uğuz	Been selected as team communicator. As a communicator, tried to reach other group members and reported the active members to TAs and instructor. Also, asked about unclear parts of the assignments in Piazza.
İrem Uğuz	Found two GitHub repos that are well designed and added those repos to the sidebar.
İrem Uğuz	Prepared the Communication Plan page.
İrem Uğuz	Wrote the agenda for Meeting 3 and Meeting 4.
İrem Uğuz	Attended the Ps 2 and shared its contents with the group members.
İrem Uğuz	Added little icons next to headers in the sidebar so the wiki page looks more colourful.
İrem Uğuz	Created user persona Aslı Bulut and wrote the step by step scenario for that user persona. After the feedback we received about making the scenarios atomic, split the scenario to three so each scenario is atomic and easier to understand.
İrem Uğuz	Prepared the class diagram for the project with Emirhan. Emirhan created the classes and I added arguments and return variables, added a few classes and methods and draw the diagram with suitable arrows and numbers.
İrem Uğuz	After getting the feedback, redesigned the class diagram and created a new diagram for it.
İrem Uğuz	Attended the ps 6 and told about its content to group members.
İrem Uğuz	Opened the Efforts Document so the team members will be able to write their personal efforts.
İrem Uğuz	Wrote an evaluation about the use case diagram to Milestones Report.
İrem Uğuz	Added deliverables to milestone report.
Gamze Gülbahar	A wiki page has been created in a format suitable for the requirements that were decided in the meeting.

Team Member	Effort
Gamze Gülbahar	Questions about the non-functional parts of the requirements have been asked and the team members were informed of the answers.
Gamze Gülbahar	A web mock-up has been created.
Gamze Gülbahar	A use case diagram have been created.
Gamze Gülbahar	The use case diagram has been updated after the reviews of the group members.
Gamze Gülbahar	The use case diagram has been updated after the feedback that we received.
Gamze Gülbahar	A class diagram evaluation has been made for the milestone repor.
Ali Ramazan Mert	Set up a doodle for meeting times in first meeting.
Ali Ramazan Mert	Added my father's github repo documentation to the wiki
Ali Ramazan Mert	Made the issue labels by searching for some tips about them.
Ali Ramazan Mert	Arranged and assigned most of the issues, made the necessary changes when needed and seperated most of the work precisely.
Ali Ramazan Mert	Made my personal wiki page.
Ali Ramazan Mert	Added the glossary part in requirements with Halit.
Ali Ramazan Mert	Made a sequence diagram and helped my workmates doing it.
Ali Ramazan Mert	Added a photo to my personal wiki page and issued week 7's all work to the decided people.
İbrahim Can Kaplan	Updated the README.md, added team members' personal wiki pages to README.md.
İbrahim Can Kaplan	Wrote the draft version of requirements as notetaker.
İbrahim Can Kaplan	Created personal wiki page and uploaded photo.
İbrahim Can Kaplan	Attended the first Customer Meeting, took notes about meeting and informed the other team members about customer's requests

Team Member	Effort
İbrahim Can Kaplan	Rewrote the requirements after customer meeting, reorganized the overall structure.
İbrahim Can Kaplan	Updated the non-functional part of requirements with respect to given feedback from TAs.
İbrahim Can Kaplan	Created use case diagrams.
İbrahim Can Kaplan	Updated use case diagrams with respect to given feedback from other team members.
İbrahim Can Kaplan	Updated use case diagrams with respect to given feedback from TAs.
İbrahim Can Kaplan	Wrote 'Moving Forward' - which is in the executive summary - part of the Milestone Project.
Arda Barış Budak	Found a github Repo I like and wrote about it on the wiki.
Arda Barış Budak	Created a wiki page describing myself.
Arda Barış Budak	Attended the customer meeting, took notes and make explanations about them to the team in meeting.
Arda Barış Budak	Created a mockup for Emirhan's scenario.
Arda Barış Budak	Attended the PS about diagrams and make explanations about them to the team in the meeting.
Arda Barış Budak	Attended the PS about diagrams and make explanations about them to the team in the meeting.
Arda Barış Budak	Created first version of sequence diagrams with Burhan and Ali.
Arda Barış Budak	Attended the customer meeting and asked questions about the requirements, then shared the answers with the team.
Arda Barış Budak	Helped in creating the final version of sequence diagrams.

Team Member	Effort
Halit Özsoy	<p>Opened up a Slack workspace, added GitHub and Poll bots, created a new bot for Piazza &amp; Slack integration.</p> <p>Created the first versions of these wiki pages: Meeting Notes, Communication Plan, Sidebar.</p> <p>Wrote wiki page, <i>Meeting Notes 1</i></p> <p>Documented 2 GitHub repos, <i>KoaJS</i> and <i>microservices-demo</i> for the first assignment.</p> <p>Wrote the <i>Glossary</i> section of the <i>Requirements</i> page with Ali.</p> <p>Created an Android Mock-Up for the persona, <i>Gülkız Kızıltuğ</i></p> <p>Attended PS-4 and shared its contents with the group members.</p> <p>Reviewed the first draft of the Use-Case Diagram over Slack.</p> <p>Reviewed the draft of the Class Diagram.</p> <p>Redesigned schemes, structures and patterns of the class diagram.</p> <p>Completed the last version of the class diagram and explained it to <i>Sequence Diagram Team</i></p> <p>Reviewed the last versions of the sequence diagrams in person.</p> <p>Created the initial template version of the Milestone Report.</p>

## 5. Communication Plan

### Plan

Where	Who	Why	When
<a href="#">BM Lounge</a>	Every Member	Weekly meeting, create plans	On Tuesdays at 19.00
<a href="#">Hangouts</a>	Whoever needs to	When a member cannot attend the weekly meeting	When Needed
<a href="#">Slack</a>	Every Member	Regular Communication	Always
<a href="#">Github</a>	Every Member	Public Discussion	Always
<a href="#">Whatsapp</a>	Every Member	In emergency situations	Always

### Details

#### Weekly Meetings

Because talking and discussing usually results better than any other communication, we will meet once a week and discuss the next steps that we should take to make our project better.

#### Hangouts

Because it is hard for each 10 team member to be present in the weekly meetings, we thought that we would need a video conference channel. Through the Hangouts, the people that are out of town can attend the weekly meeting and tell their ideas.

#### Slack

Sometimes, when doing the assignments of the week, we may need to discuss our results. To discuss these online, we chose to use Slack because of its nice design that allows us to open new channels according to the topic of the discussion. Also, when the code is shared through the Slack, it looks better than other available texting apps.

#### Github

Github is a very good place to do a group project because each contributor to the project can see the latest version of the project. Also, the old versions are kept safe in the memory of the Github to be used whenever needed. There are many functions of Github like issues, tags that are useful to develop a project and make it easy to communicate with the other developers.

### WhatsApp

WhatsApp is a widely used texting app. Each group member uses WhatsApp frequently and usually checks it multiple times a day. Because of this, we decided to open a WhatsApp group to communicate on emergency situations as it makes it easy and fast to connect to other group members.

## 6. Requirements

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## Glossary

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- **User:** A person using the app/web platform of the project.
  - **Guest:** A user who is not registered yet.
  - **Registered:** A user who has signed up to the platform.
  - **Admin:** A user with special privileges.
- **Language:** One of English/Turkish/Chinese or other provided language in the platform.
- **Learning Material:** Content in one of the categories below, in one of the types below, in a given language used to teach users that language.
  - **Categories:** Categories of a learning material, one of Listening, Reading, Grammar, Vocabulary or Writing.
    - **Listening:** Materials relating to improving listening skills in a given language.
    - **Reading:** Materials relating to improving reading skills in a given language.
    - **Grammar:** Materials relating to improving grammar skills in a given language.
    - **Vocabulary:** Materials relating to improving vocabulary skills in a given language.
    - **Writing:** Materials relating to improving writing skills in a given language.
  - **Types:** Types of a learning material, one of Notes, Assignment, Exercise or Exam.
    - **Notes:** Materials that present notes about the content.
    - **Assignments:** Materials that require user to write a long answer(paragraph, essay, etc.) and another user to review & evaluate.
    - **Exercises:** Materials that require user to answer questions which can be automatically graded.
- **Proficiency Exam:** A special exam consisting of questions used to evaluate the expertise of a user in a given language if the user wants to start directly from any level higher than **A1**.
- **Achievement:** A user can get special labels according to accomplishing some tasks with given conditions, such as in 2 minutes.
- **Progress of Learning:** The statistics about the users' learning history of a given language ie: accomplished exercises, assignments, durations.
- **Interaction:** Users can interact with each other in either one of the ways below.
  - **Communication:** A user can send a request to another user to chat privately.
    - **Request:** When a user sends a chat request to another user, chatting only starts after receiver user accepts the request.
  - **Review:** The process of a user grading another user's writing assignment, and providing feedbacks to that user related to the assignment.
    - **Feedback:** An explanation of how the user can do better or an error found in one's writing assignment.
    - **Annotation:** A user can add annotation to the writing assignment he/she is reviewing to give feedback to the reviewee.
- **Rating:** A user can rate other users he/she interacted based on the related interaction.
- **Comment:** A user can comment about other users he/she interacted based on the related interaction.
- **Level of Expertise:** The users' level of proficiency shown as either **A1**, **A2**, **B1**, **B2**, **C1** or **C2** in a given language.
- **Search System:** A system allowing users to search for contents in a given language.
  - **Basic Search System:** A search system based on keywords and semantic search.
  - **Advanced Search System:** A search system that allows search and filter features by type, category, topic, difficulty and tags.
- **Contribution System:** Users can upload new learning materials and suggest them to be added to the system, or they can suggest new tags to existing material.
  - **Verification:** Admins can verify suggested tags to existing material to add them to the system. Also, for suggested new user uploaded materials, either a specified amount of users can support the suggestion to approval or an admin user can verify the material by himself/herself.

# Requirements

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## 1. Functional Requirements

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### 1.1. User Requirements

- 1.1.1. Users
  - 1.1.1.1. There will be three types of users.
  - 1.1.1.1.1. Guests
    - 1.1.1.1.1.1. Guest users can access 5 exercises for each type of learning materials(except writing) before being prompted for registering.
  - 1.1.1.1.2. Registered Users
    - 1.1.1.1.2.1. These users should access to materials anytime and anywhere.
    - 1.1.1.1.2.2. The users who want to start from higher level, shall take a proficiency exam.
    - 1.1.1.1.2.3. After every question, the users shall be able to see the correct answer.
    - 1.1.1.1.2.4. Users shall be able to send their essays to other users for grading. Grading includes feedback as well as grade.
    - 1.1.1.1.2.5. If two users interact, they shall be able to rate and comment on each other.
    - 1.1.1.1.2.6. Users shall be able to see the progress of their learning such as completed exercises, grade achievements for each language.
    - 1.1.1.1.2.7. Users should be able to upload their suggestion of some learning materials, with suggested tags included.
    - 1.1.1.1.2.8. Users should be able to declare whether they want to review essays or not.
    - 1.1.1.1.2.9. Users should be able to report inappropriate behaviours and sensitive content.
  - 1.1.1.1.3. Administrators
    - 1.1.1.1.3.1. Administrators shall handle reports and take necessary actions.
    - 1.1.1.1.3.2. Oversees the acceptance of suggested tags in any content.
- 1.1.2. Communication
  - 1.1.2.1. Users shall be able to communicate over a messaging channel.
    - 1.1.2.1.1. Two users can use the messaging service if and only if one sends a request for communication and the other one accepts.
- 1.1.3. Login and Sign-up
  - 1.1.3.1. Unregistered users shall be able to register after giving the necessary information.
    - 1.1.3.1.1. Users shall give their email address while registering.
    - 1.1.3.1.2. Users shall give their names while registering.
    - 1.1.3.1.3. Users shall create a unique username when registering to the system.
    - 1.1.3.1.4. Users shall set up a password while registering to the system.
  - 1.1.3.2. Registered users shall be able to login to the system.
    - 1.1.3.2.1. Users shall be able to login to the system using their email address and their passwords.
    - 1.1.3.2.2. The users that had forgotten their passwords shall be able to set up a new password.

### 1.2. System Requirements

- 1.2.1. Learning Materials
  - 1.2.1.1. There should be learning materials in different languages.
  - 1.2.1.2. The learning materials should be mapped into 5 different categories: listening, reading, grammar, vocabulary and writing.
  - 1.2.1.3. The materials uploaded by users exist in the system after verification.
- 1.2.2. Assignments and Exams
  - 1.2.2.1. Listening, reading, grammar and vocabulary categories of assignments or exams will be graded automatically by the system.

- 1.2.2.2. A user should be able to pick the person who shall grade the writing assignment.
- 1.2.2.3. System provides the answers after every question in exercises.
- **1.2.3. Languages**
  - 1.2.3.1. The system shall support multiple languages.
- **1.2.4. Recommendation**
  - 1.2.4.1. For grading writing assignments, the system shall recommend a selection of users.
    - 1.2.4.1.1. When tags of the writing assignment and the interest areas of a user who is able to evaluate the essay are similar, the system recommends that user for grading.
- **1.2.5. Annotation**
  - 1.2.5.1. The system shall allow the annotation of both text and image content.
- **1.2.6. Rating**
  - 1.2.6.1. The system shall only support rating and commentation between interacting users.
- **1.2.7. Contribution**
  - 1.2.7.1. New learning materials should be suggested by the users who upload their suggested materials.
  - 1.2.7.2. Each user shall be able to vote to approve or reject for uploading suggested material.
  - 1.2.7.3. If the approval rate is greater than 70% and at least 5 users voted then the material automatically shall be uploaded to the system.
- **1.2.8. Searching**
  - 1.2.8.1 The system shall support two types of search: basic and advanced.
  - 1.2.8.1.1. Basic search only uses keywords for searching.
  - 1.2.8.1.2. Advanced search shall filter the content by topic, difficulty, scope, tag and type.
- **1.2.9. Tagging**
  - 1.2.9.1 The system should provide a set of tags with every content which informs the user about the topics that discussed.
  - 1.2.9.2 The tags should be able to be suggested to be altered by the users, administrators shall verify the suggested tags.

## 2. Non-Functional Requirements

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### 2.1. Security

- 2.1.1. User data shall be protected and used according to [LAW ON THE PROTECTION OF PERSONAL DATA](#)
- 2.1.2. The personal information, contact information, copyrighted contents, license issues and everything related to these paradigms should be respected and considered.
- 2.1.3. System shall be protected against SQL injection.
- 2.1.4. System should use encryption for personal messages between users.
- 2.1.5. Storing of usernames and passwords should conform to security standards such as hashing.

### 2.2. Reliability

- 2.2.1. The system shall serve to 300 users without breaking.

### 2.3. Availability

- 2.3.1. Project shall be available on both Android and Web platforms.
- 2.3.2. The application should be deployable on a manually configurable remote server.
- 2.3.3. The system should perform back up daily.

### 2.4. Accessibility

- 2.4.1. The system should appeal and work for both visually and hearing impaired users. Learning materials provided should be filtered according to their impairments.

### 2.5. Protocols & Standards

- 2.5.1. The system shall support the [W3C Web Annotation Data Model](#).

### 2.6. Performance

- 2.6.1. The system shall respond to 100 requests per second.
- 2.6.2. Maximum response time shall be at most 500 ms.

# Change Log

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## 26 February 2019

- Added Glossary
- Fixed requirements according to feedbacks
- Updated requirements to match with the answers from customer meeting

## 27 February 2019

- Added the requirement part 1.1.3 by Irem. Further changes will be made to this section after determining the details.

## 3 March 2019

- Updated non-functional requirements.

## 5 March 2019

- Proof-read and made minor corrections.

## 14 March 2019

- Guest user's access details are edited.
- Added a part about approval of learning materials. (1.2.7 edited)
- Updated registered users part about reviewing essays.

# 7. Mockups

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## 7.1. User Personas

### 1. Aslı BULUT

- 20 years old
- University student
- Interested in learning French
- Has background in French and thinks that she is on level B2
- Bad at vocabulary
- Wants to improve her daily conversations skills
- [Scenario about Aslı](#)

Aslı is a 20-year-old university student at Bogazici University. French was the second language that is taught in her high school and she really enjoyed French till then. When she started university, because of her schedule she couldn't take the French class and be very disappointed about it. She couldn't afford to go to a private course for the language as they were quite expensive in Istanbul. She thinks that without practice, it is easy to forget about a language and lose your fluency and she doesn't want that to happen to her as she loves learning French. She thinks that she is on level B2 thanks to her high school education but there is a possibility of decreasing because she couldn't study French during her summer holiday. Until the next semester that she can take an official course, she wants to keep improving herself in French. She thinks her weakest area is vocabulary as she finds it hard to memorise things. Also, she wants to improve her daily French skills as she wants to do Erasmus in France and thinks that it is important to improve her life there.

## Acceptance Criteria

1. Requirement 1.1.3.2.1
2. Requirements 1.2.1.1 and 1.2.3.1 and 1.1.1.1.2.1
3. Requirement 1.2.1.2
4. Requirement 1.1.1.1.2.6
5. Requirements 1.1.1.1.2.3 and 1.2.2.1 and 1.2.2.3
6. Requirements 1.1.1.1.2.3 and 1.2.2.1 and 1.2.2.3
7. Requirement 1.2.8.1

8. Requirement 1.2.8.1.2
9. Requirement 1.2.9.1
10. Requirements 1.2.1.1 and 1.2.1.1
11. Requirements 1.2.1.1 and 1.2.1.1
12. Requirements 1.1.1.2.6

## 2. Gülkız KIZILTUĞ

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- 55 years old
- Caretaker
- Interested in learning English
- Has no background in English, wants to start from the beginning
- Zero vocabulary, zero grammar
- [Scenario about Gülkız](#)

Gülkız is 55 years old. She works for a software company as office caretaker and lives in Ankara, Turkey. She has a lot of free time at work, when everywhere is clean and none of the developers want to drink tea or coffee. She wants to learn English in her free time. Since she left the school when she is twelve years old, she knows nothing about English. She wants to start at the very beginning. Gülkız has no interest in practising daily English by speaking or texting. She just wants to learn the very basic grammar rules of English, with a little vocabulary.

### Acceptance Criteria

1. Requirement 1.1.1.1.1
2. Requirements 1.2.1.1 and 1.2.3.1
3. Requirement 1.1.1.1.1
4. Requirements 1.1.3.1.1, 1.1.3.1.2, 1.1.3.1.3, 1.1.3.1.4
5. Requirements 1.2.3.1 and 1.2.1.1
6. Requirement 1.1.1.1.2.2
7. Requirement 1.2.1.2
8. Requirement 1.1.1.1.2.3 and 1.2.2.1 and 1.2.2.3
9. Requirement 1.1.1.1.2.3 and 1.2.2.1 and 1.2.2.3
10. Requirement 1.1.1.1.2.6

## 3. Francisco Tárrega

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- 37 years old
- Classic guitar player and composer
- Expert in Spanish and interested in speaking with an English native
- Native in Spanish, very good at grammar and everything
- Already good at English and wants to improve speaking skills with a native
- [Scenario about Francisco](#)

Francisco is a 37-year-old guitar player living in Cordoba. He is native in Spanish. He knows a lot about the language like grammar, history of the language, etymological knowledge, forgotten words etc. He really enjoys Spanish, so he thought that he can teach some Spanish to transfer his knowledge to other. He also knows English and he is not bad at it. He knows all the grammar, necessary vocabulary etc., but he is not so good at speaking fluently. He thinks that he needs some improvement in his speaking skills, so he wants to speak with someone native in English and do some practice. These are the two main reasons that make him use the application.

### Acceptance Criteria

1. Requirements 1.1.1.1.2.2 and 1.1.1.1.2.5 and 1.1.1.1.2.6 and 1.1.1.1.2.8
2. Requirements 1.1.2.1 and 1.1.2.1.1
3. Requirement 1.1.3.2.1
4. Requirements 1.1.1.1.2.3 and 1.2.2.1 and 1.2.2.3
5. Requirements 1.1.1.1.2.3 and 1.2.2.1 and 1.2.2.3 and 1.2.8.1 and 1.2.8.1.2

6. Requirement 1.2.9.1
7. Requirements 1.2.1.1 and 1.2.1.1
8. Requirements 1.1.1.1.2.6

## 7.2. Scenarios And Mockups

Table of Contents
1. University Student - Aslı Bulut
2. Caretaker - Gulkiz Kiziltug
3. Musician - Francisco Tárrega

# User Scenarios

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## 1. Aslı Bulut

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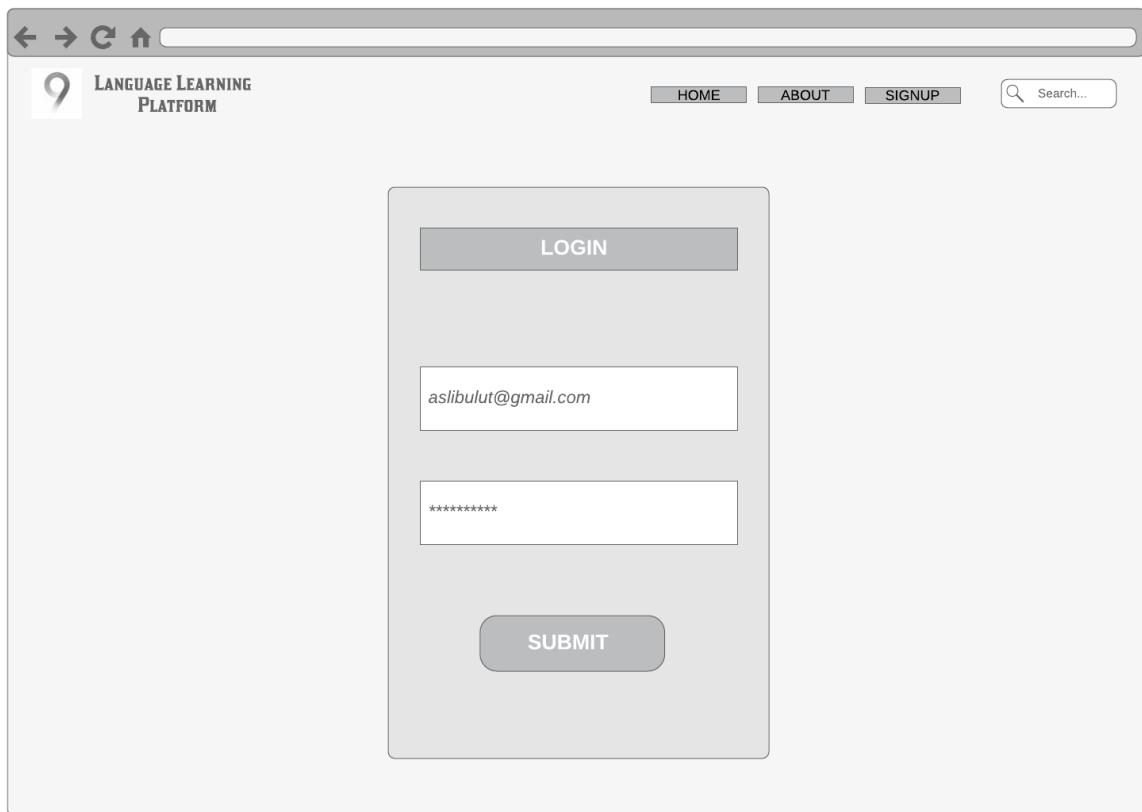
- User : [Aslı Bulut](#)
- Platform: Web
- User Type: Registered
- Language of Interest: French
- The requirements that each step in the scenario ensures can be found listed in [acceptance criterias](#)

### Scenario 1.1 - Login

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#### Steps and Mock-ups

1. Aslı opens her laptop and logs in to the system using her email address and password.



2. After successfully logging in, the home page opens. She clicks the French in her languages section.



## Scenario 1.2 - Solving Grammar Exercise For French

### Steps and Mock-ups

1. In the French language's page, she sees different categories of exercises. There is listening, writing, vocabulary and grammar section. She clicks the grammar section to continue her exercise.



## FRENCH

Listening

Writing

Reading

Vocabulary

Grammar



2. She sees the 4th question of the Past Tense exercise. She remembers that she had to leave when she was solving the exercise due to her friend's call. She continues where she left off and clicks the choice A as she thinks the answer to the question is that.
3. A note below the question appears after she clicks, saying the right right answer is B and her answer is wrong. She thinks about it and understands where she did wrong and skips to the next question.



## Le Passé Composé (Past Time) Exercises

4. Nous avons \_\_\_\_\_ un gateau pour ton anniversaire.

- A. Manger
- B. Mangé
- C. Mangeions
- D. Mangons

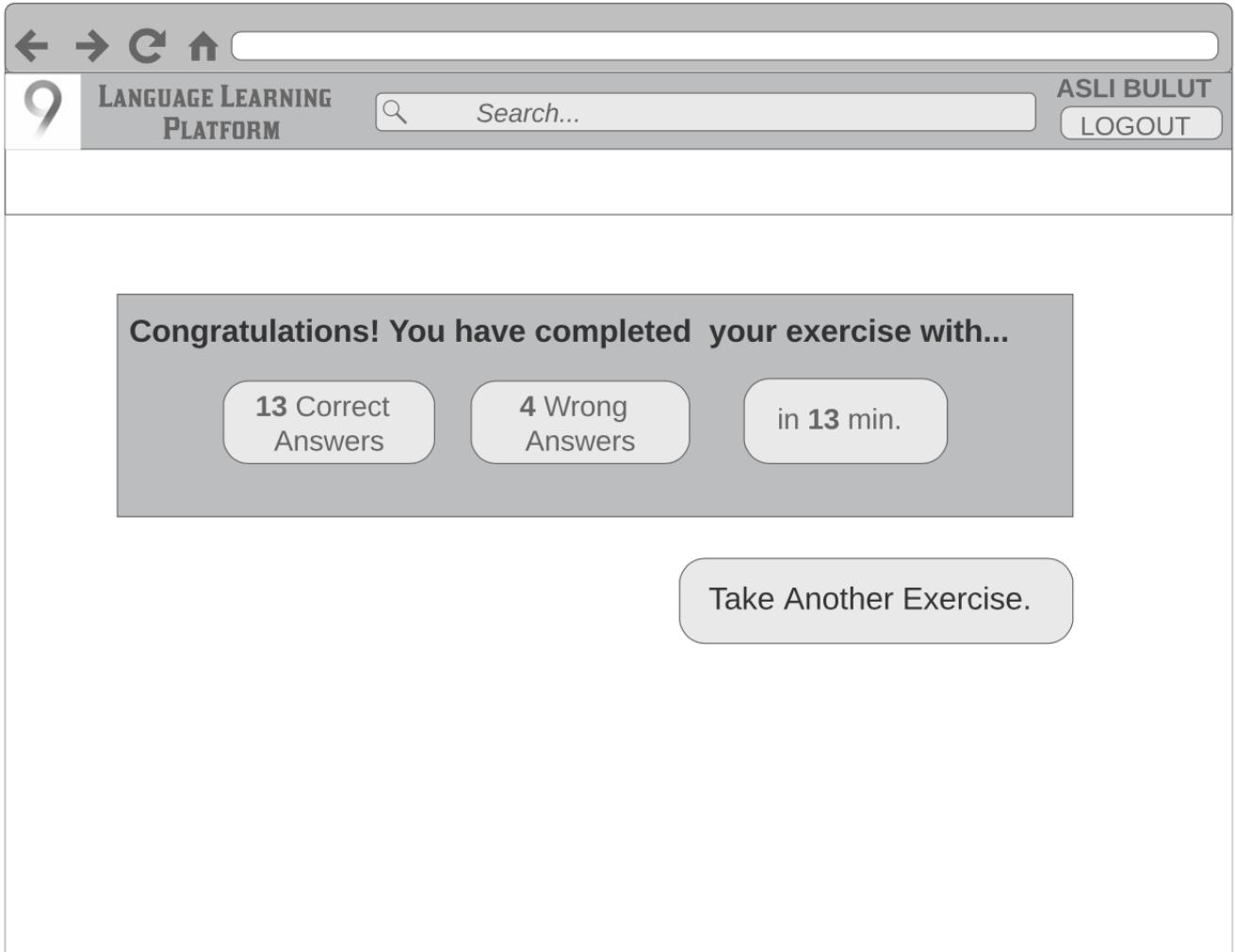
Your answer is wrong! Right answer is B.

SKIP

4. She solves this question right and her answer lights up in green, indicating she answered correctly.

The screenshot shows a web-based language learning platform. At the top, there are navigation icons (back, forward, search, home) and user information ('ASLI BULUT' and 'LOGOUT'). The main title 'Le Passé Composé (Past Time) Exercises' is displayed in a large, bold font. Below the title, a question is presented: '5. Tu \_\_\_\_\_ en bonne humor.' Four options are listed: A. Etre, B. étais, C. Es, and D. été. Option C. Es is highlighted in green, indicating it is the correct answer.

5. She finishes 17 questions about Past Tense and completes the exercise. At the end of the exercise, she sees that she made 13 correct answers and 4 wrong answers in 13 minutes. She feels tired after solving so many questions and closes the program.



### Scenario 1.3 - Advanced Search

#### Steps and Mock-ups

1. She clicks the search bar on the page and clicks the advanced search.

The screenshot shows the homepage of the "LANGUAGE LEARNING PLATFORM". At the top, there are navigation icons (back, forward, refresh, home) and a search bar with the placeholder "Search...". Below the search bar are two buttons: "Basic Search" and "Advanced Search". In the top right corner, there is a user profile for "ASLI BULUT" and a "LOGOUT" button. A large, bold text box in the center of the page says "Conguratulations! Completed your exercise."

2. In the advanced search page, she adds measurements and vocabulary tags to her search and adds a filter for B2 level as it is her current level in French. Then she hits the search button.

The screenshot shows the "ADVANCED SEARCH" page of the "LANGUAGE LEARNING PROGRAM". At the top, there is a search bar with the placeholder "Search..." and a "SEARCH" button with a magnifying glass icon. Below the search bar are three input fields: "Vocabulary Tags", "Measurements", and "French". Underneath these is a single input field containing the text "B2". At the bottom of the page are two buttons: "Apply The Filter" and "Select More".

3. The results of her search appear. On the top result, there is a vocabulary exercise about food recipes and measurements of the ingredients. She likes that exercise and clicks on it.

The screenshot shows a web-based language learning platform. At the top, there is a header bar with navigation icons (back, forward, search, etc.), the text "LANGUAGE LEARNING PROGRAM", a search bar with placeholder "Search...", and user information "ASLI BULUT" and "LOGOUT". Below the header is a section titled "RESULTS FOR..." containing several filter buttons: "Vocabulary Tags", "Measurements", "French", and "B2". To the right of these filters is a button labeled "Add New Filters". Below this section, the main content area displays a heading "1. Exercice De Vocabulaire (Vocabulary Exercise)" followed by the text "Topic: food recipes and measurements of the ingredients.". Underneath this text are two buttons: "Notes About This Exercise" and "Click and Solve Now!". There is also a small ellipsis "..." centered below the topic text.

4. She studies the notes about the exercise by clicking the notes button on the exercise part.

The screenshot shows a mobile application interface. At the top, there is a navigation bar with icons for back, forward, and search, followed by the text "LANGUAGE LEARNING PROGRAM". To the right of the search bar are the names "ASLI BULUT" and "LOGOUT". Below the navigation bar, a large button labeled "NOTES" is visible. The main content area has a title "French Cooking Terms". Under the title, there are four definitions listed: **Depouille(r)**, **En croute**, **En papillote**, and **Flambe(r)**. Each definition is preceded by a bold term. At the bottom left of the content area, there is a small ellipsis (...). On the right side of the content area, there is a button labeled "Click and Solve Exercise!".

## 2. GÜLKİZ KIZILTUĞ

- User : [GÜLKİZ KIZILTUĞ](#)
- Platform: Android
- User Type: Guest-Registered
- Language of Interest: English
- The requirements that each step in the scenario ensures can be found listed in [acceptance criterias](#)

### Scenario 2.1 - Guest User

#### Steps and Mock-ups

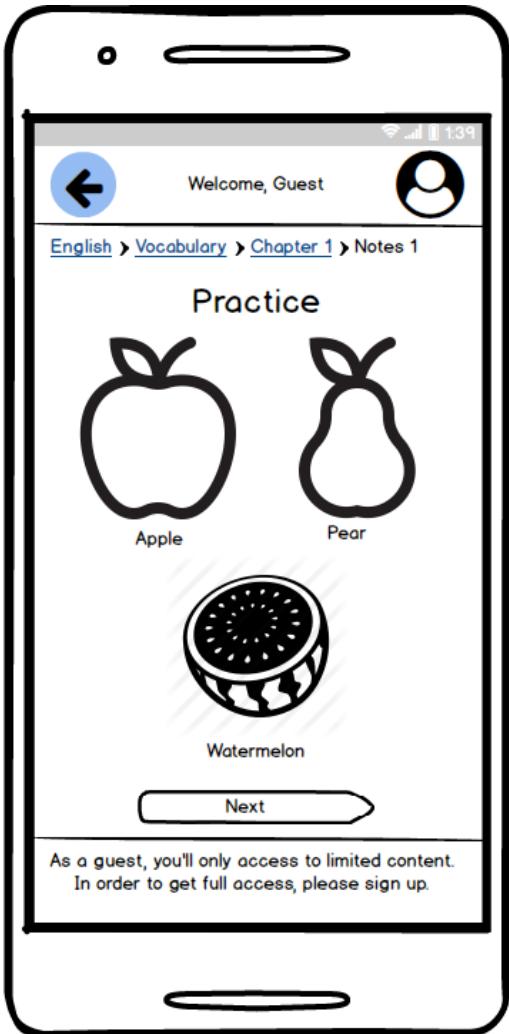
1. After installing the application GÜLKİZ runs it and see the login page. She wants to try the application as a guest before signing up. She chooses to be a guest and see only some limited content.



2. Then she chooses 'English' in a list of available languages.



- 
3. The application provides her a limited vocabulary content because she is a guest. In first exercise, she learns what apple, pear, and watermelon mean.



## Scenario 2.2 - Register

### Steps and Mock-ups

- Without skipping to the second exercise, she decides to sign up because she likes the format and the content. So she goes back to the first page to create an account for herself. Gülkız gives the necessary information; her e-mail address and her name. She creates a password and username for herself. Then she clicks to 'done' and finishes the registration.



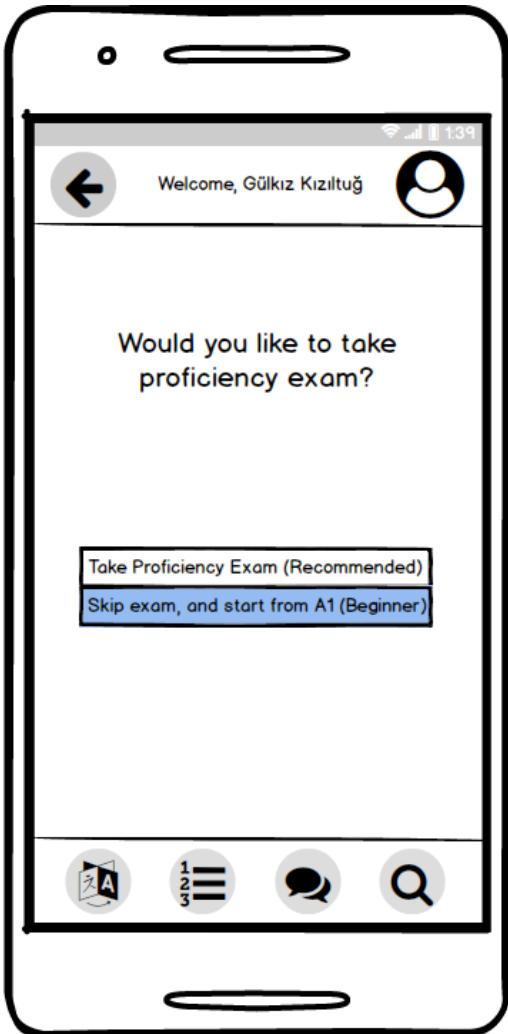
## Scenario 2.3 - Beginner Exercises

### Steps and Mock-ups

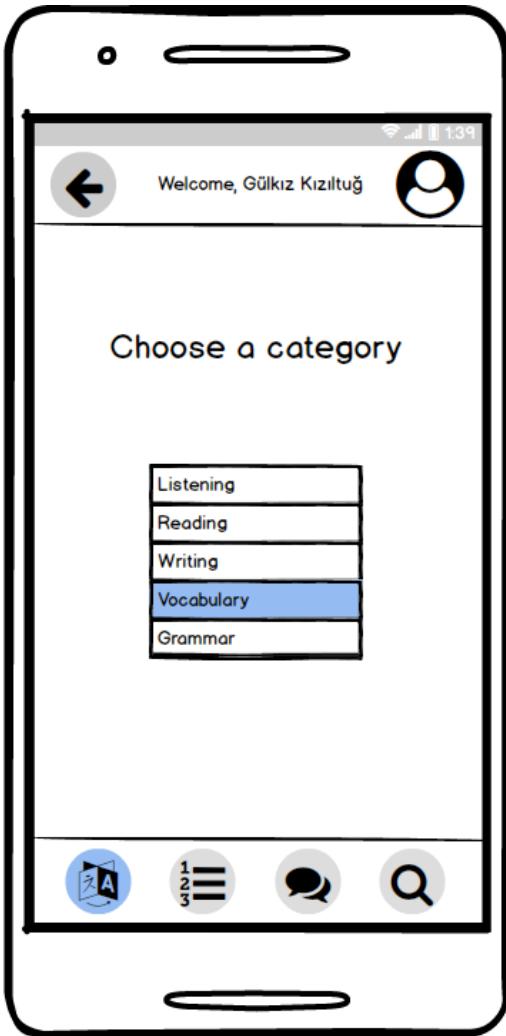
- After logging in to her new account, she is at the home page, she sees the language options and she chooses English.



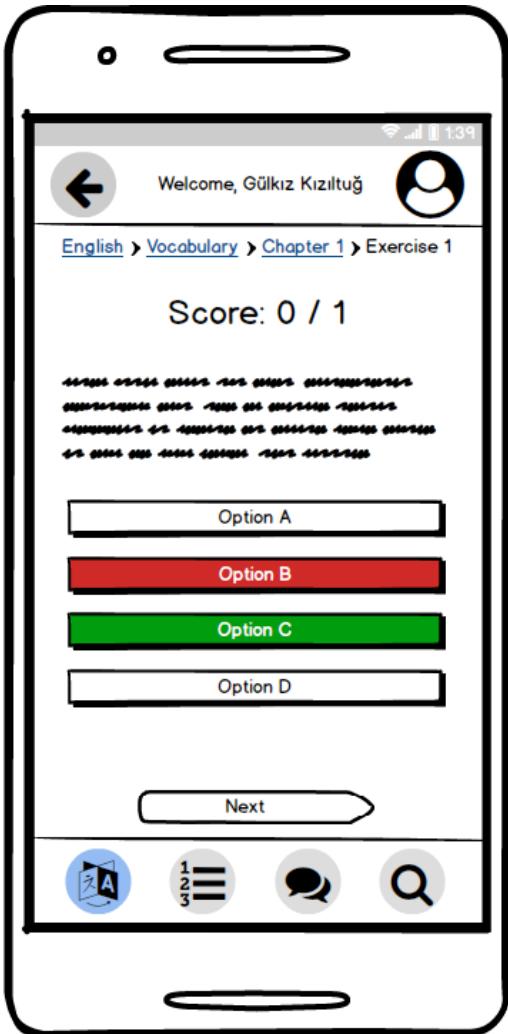
- 
6. She does not want to solve the proficiency exam, which is recommended by the system, since she is aware that she is a beginner.  
So she goes to the A1 level exercises.



7. In the page of English language, she sees five different exercise categories. These categories are listening, reading, writing, vocabulary and grammar. She clicks vocabulary.



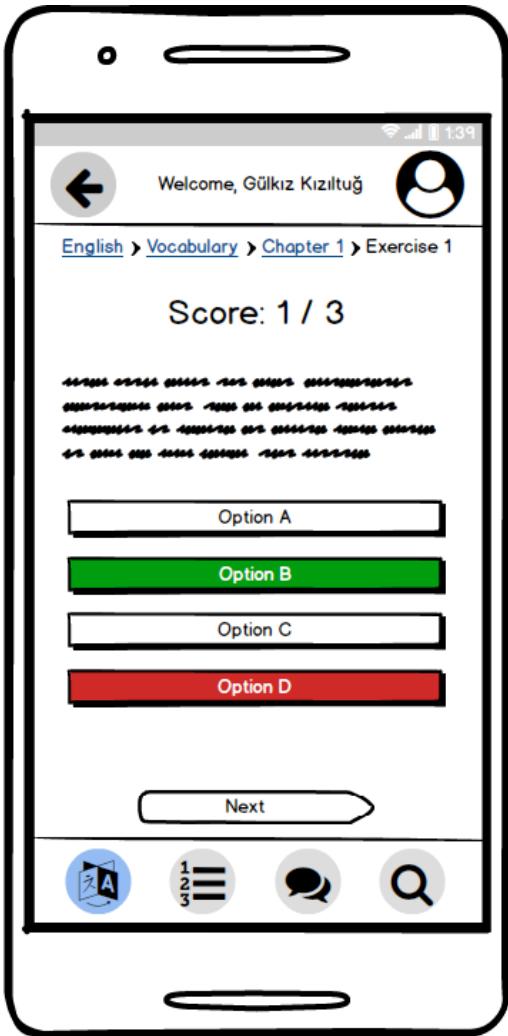
8. In first question, she answers randomly and sees that the button she clicked turns into red, so she understand it was a wrong answer. Then she sees the correct one turned into green.



9. Gulkiz solves totally 3 questions like the first one. She gives the correct answer to the second question randomly, then wrong to the third one.



10. When learning English words from questions, someone at the office orders a coffee so she quits the app. After she leaves the app, she sees her score from the beginning of the vocabulary exercise until that moment, 1/3.



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## Scenario 3

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### 3. Francisco Tárrega

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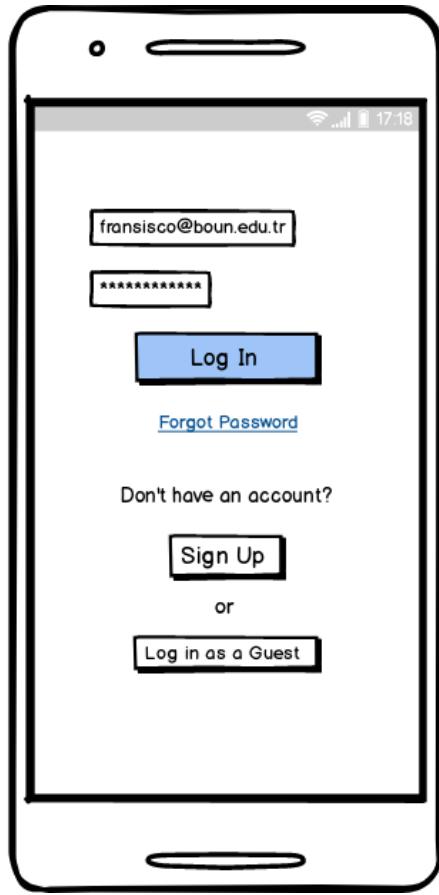
- User : [Francisco Tárrega](#)
- Platform: Android
- User Type: Registered
- Language of Interest: English
- The requirements that each step in the scenario ensures can be found listed in [acceptance criterias](#)

#### Scenario 3.1 Login from mobile phone

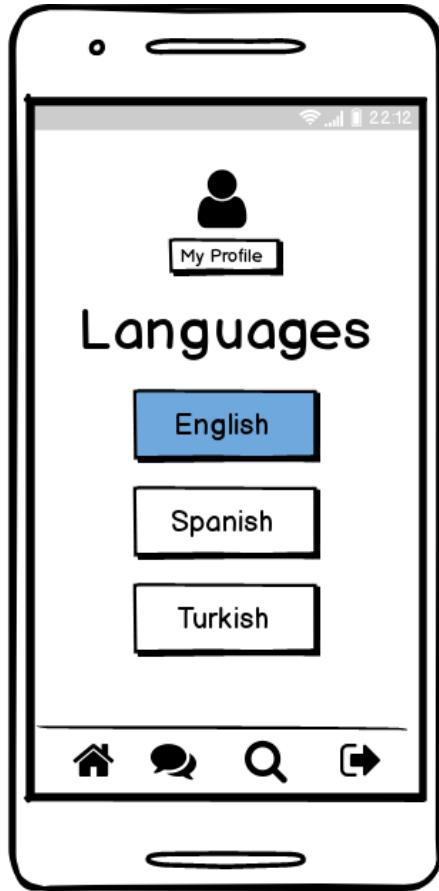
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##### Steps and Mock-ups

1. Francisco opens his mobile phone and logins to the system using her mail address and password.



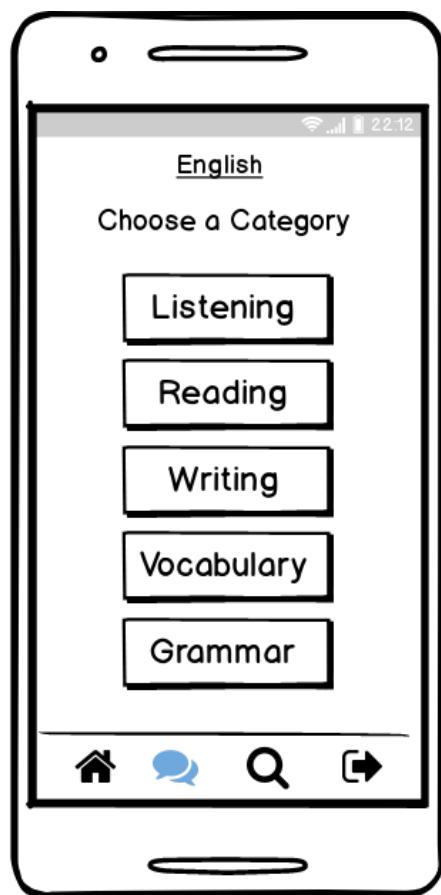
2. After successfully logging in, the home page opens. He clicks the English in her languages section.



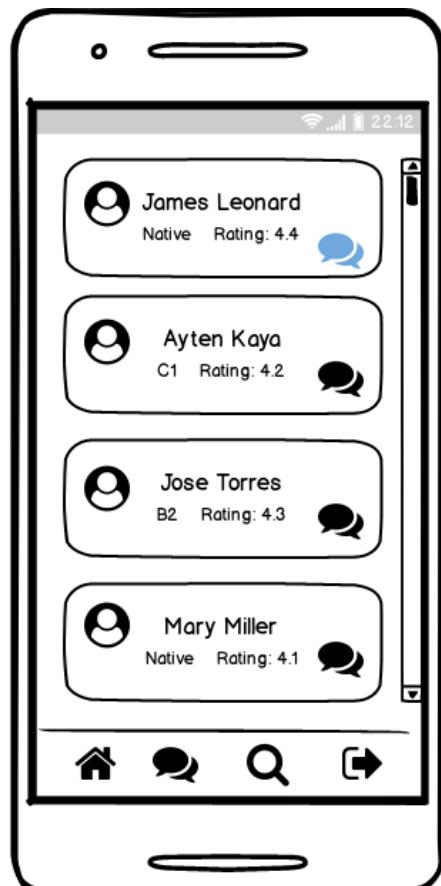
## Scenario 3.2 Speaking practice and feedback

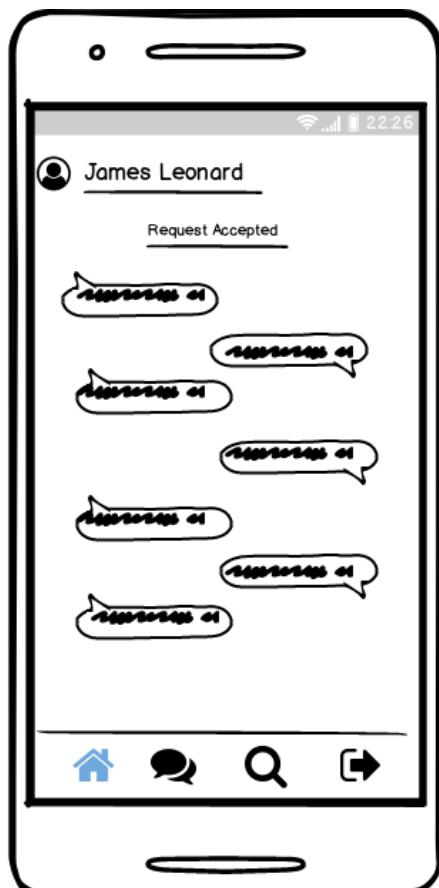
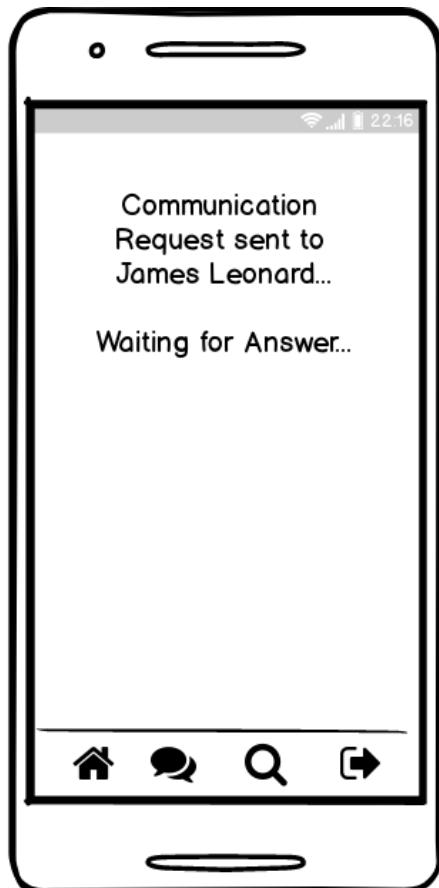
## Steps and Mock-ups

3. After a look at the exercise materials such as vocabulary, writing, reading etc. he decides that he wants to make some speaking practice with a native.

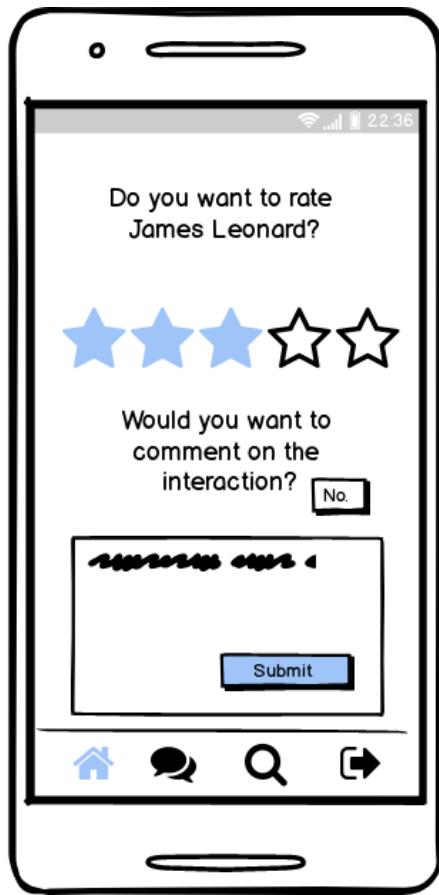


4. He looks up for a native English speaker(also an expert in English) and starts a conversation with someone who is native in English.





- After 30 minutes, Francisco and the expert finishes the conversation. An evaluation panel opens up in front of both of them. They give each other feedback and evaluate themselves. Francisco likes the talk and give the expert 3 stars.



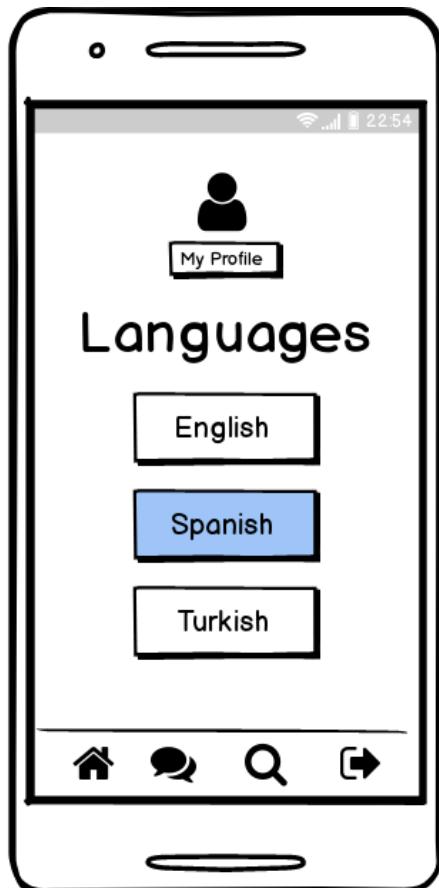
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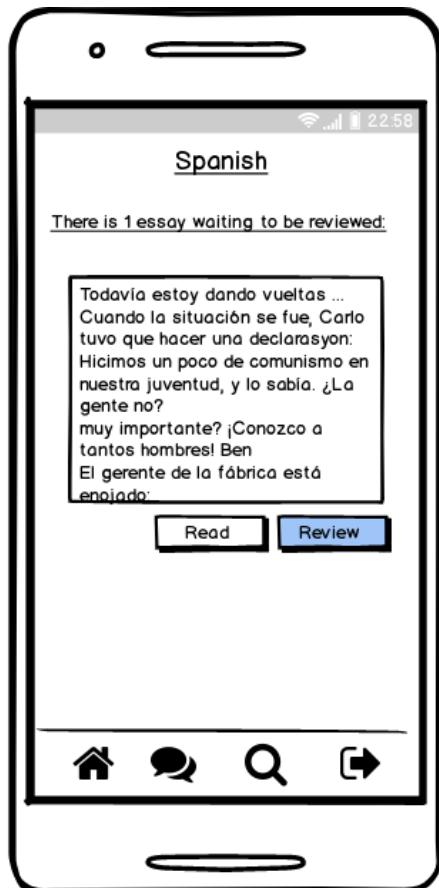
### Scenario 3.3 Grading essays

---

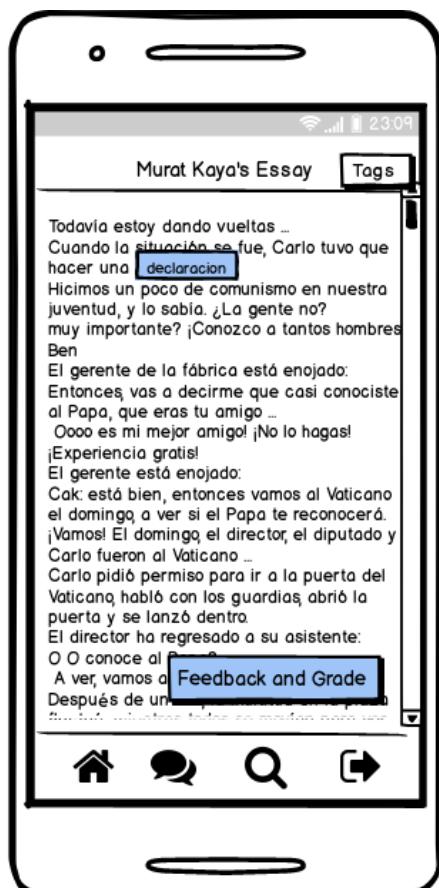
#### Steps and Mock-ups

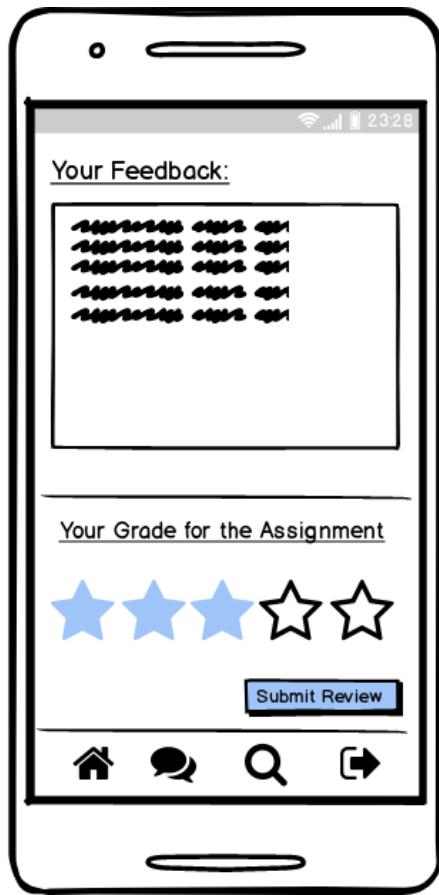
6. In his Spanish page, he sees a writing exercise of a Spanish learner waiting to be reviewed.





7. He reads the essay, corrects the mistakes, give feedback and a grade. After that, he uploads the corrected and graded essay for the learner.





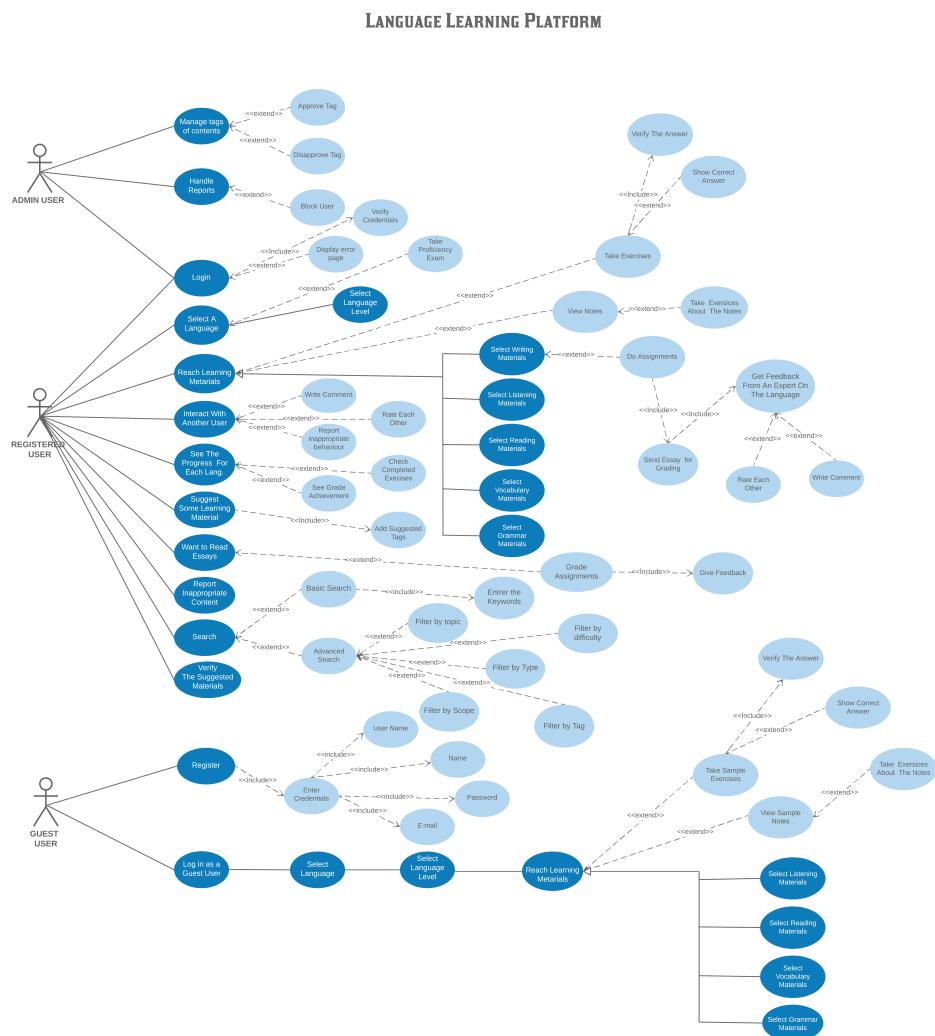
8. He thinks he is done for today, he clicks exit and closes the application.



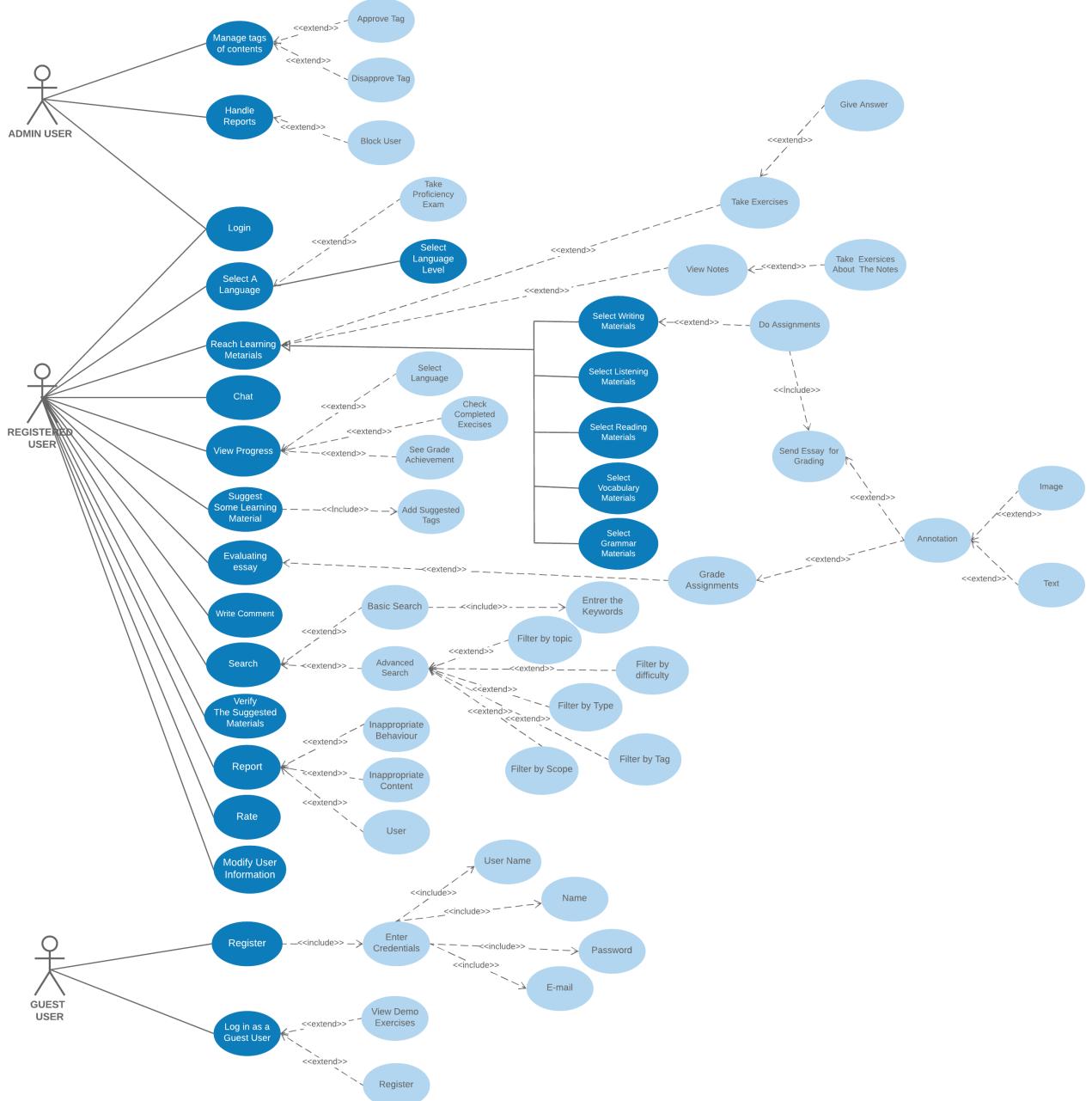
## 8. Design

## 8.1. Use Case Diagrams

### Draft

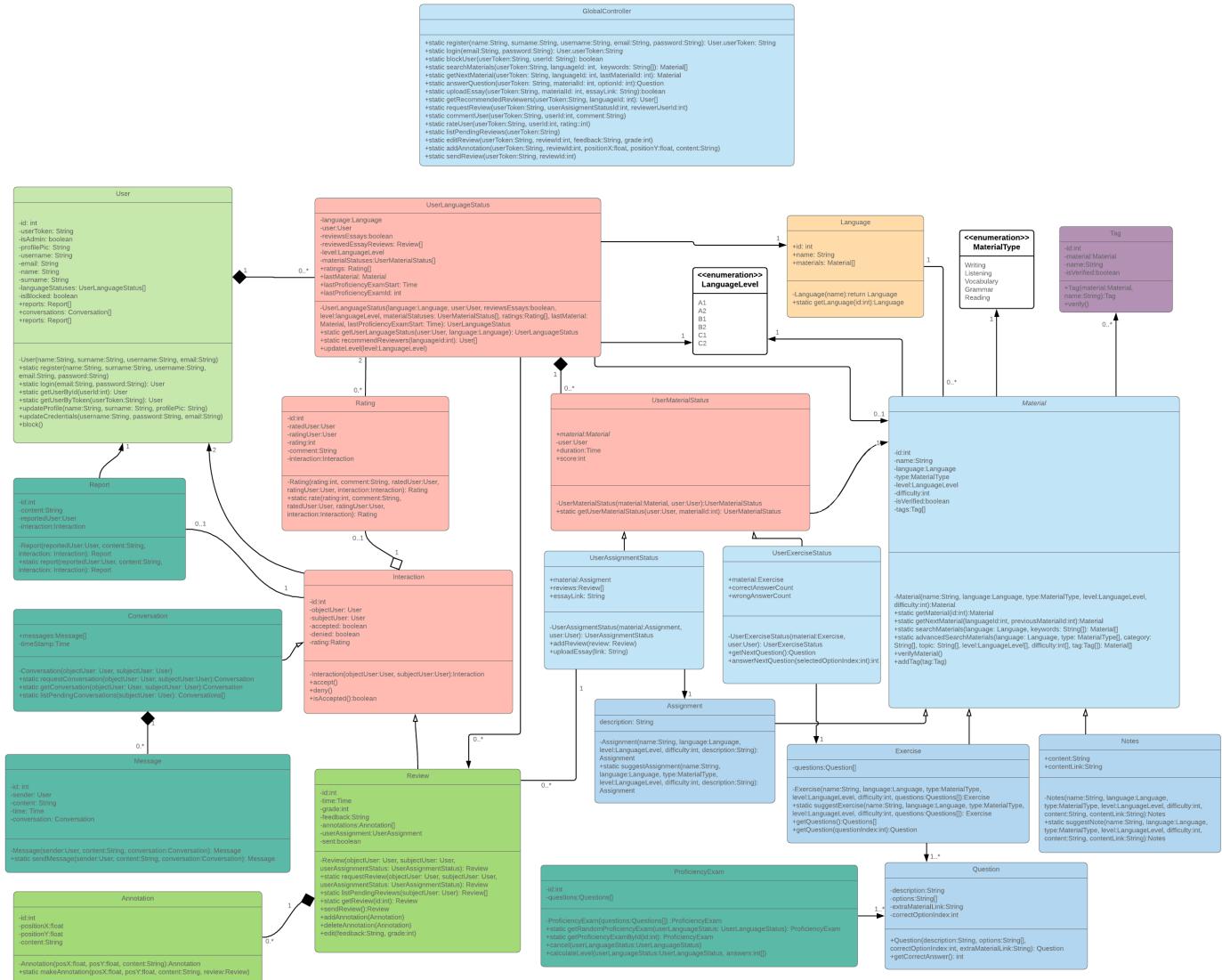


## LANGUAGE LEARNING PLATFORM

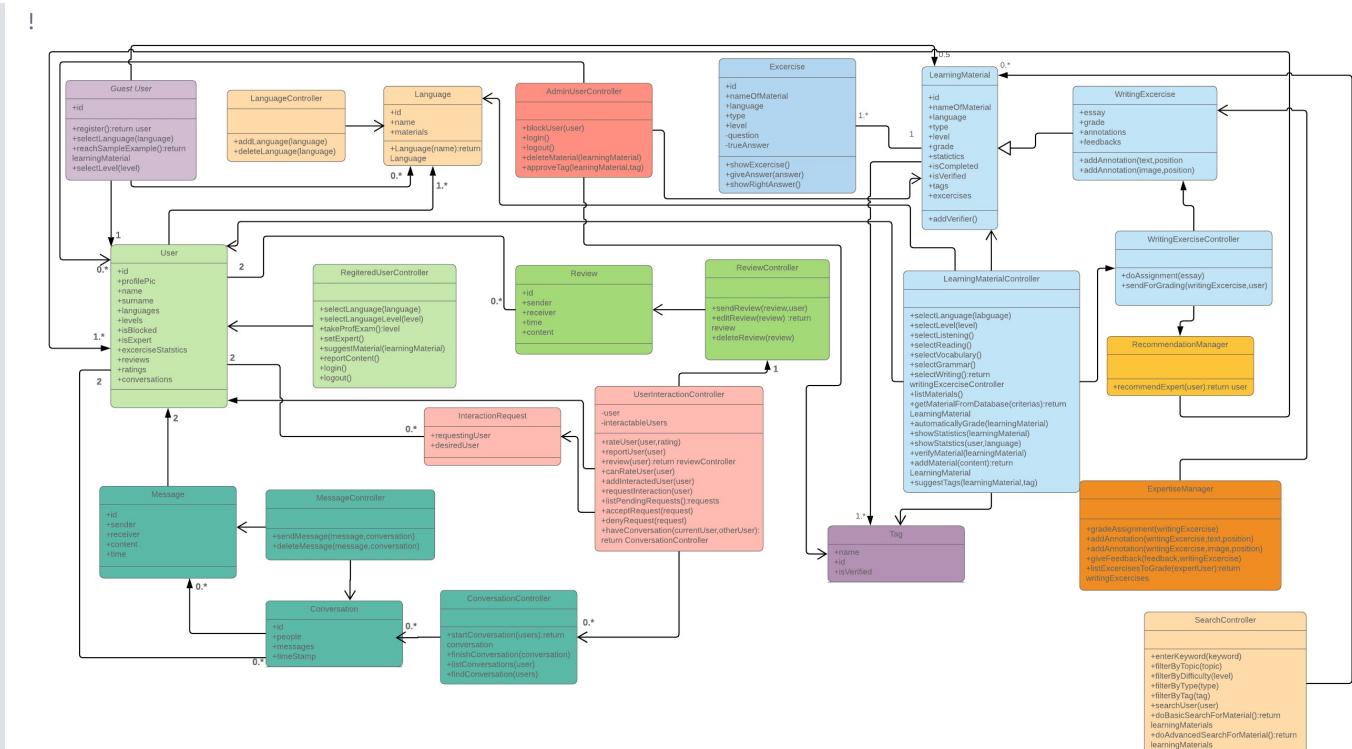


### 8.2. Class Diagram

Class Diagram - 25 March 2019

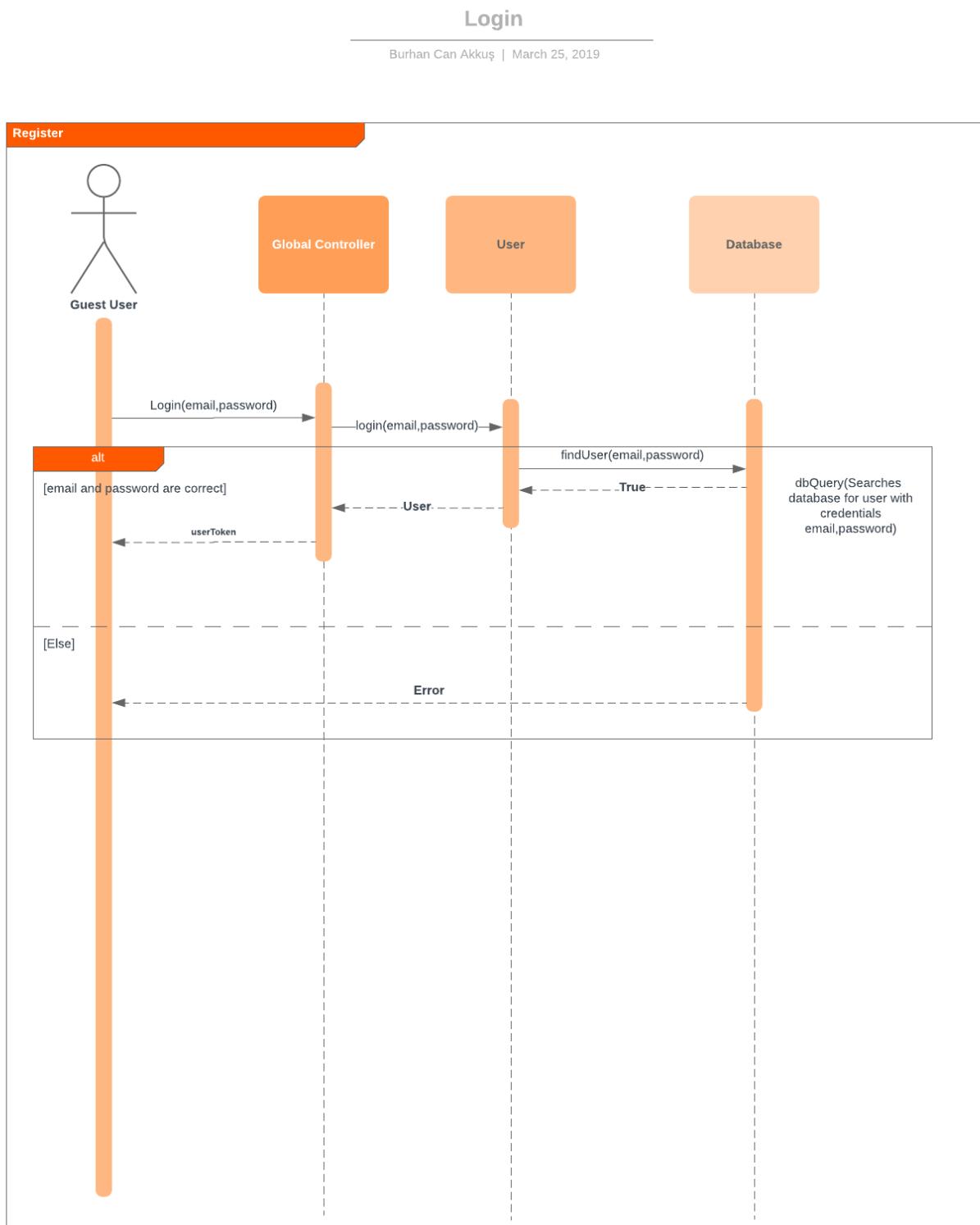


# Class Diagram Draft 1



### 8.3. Sequence Diagrams

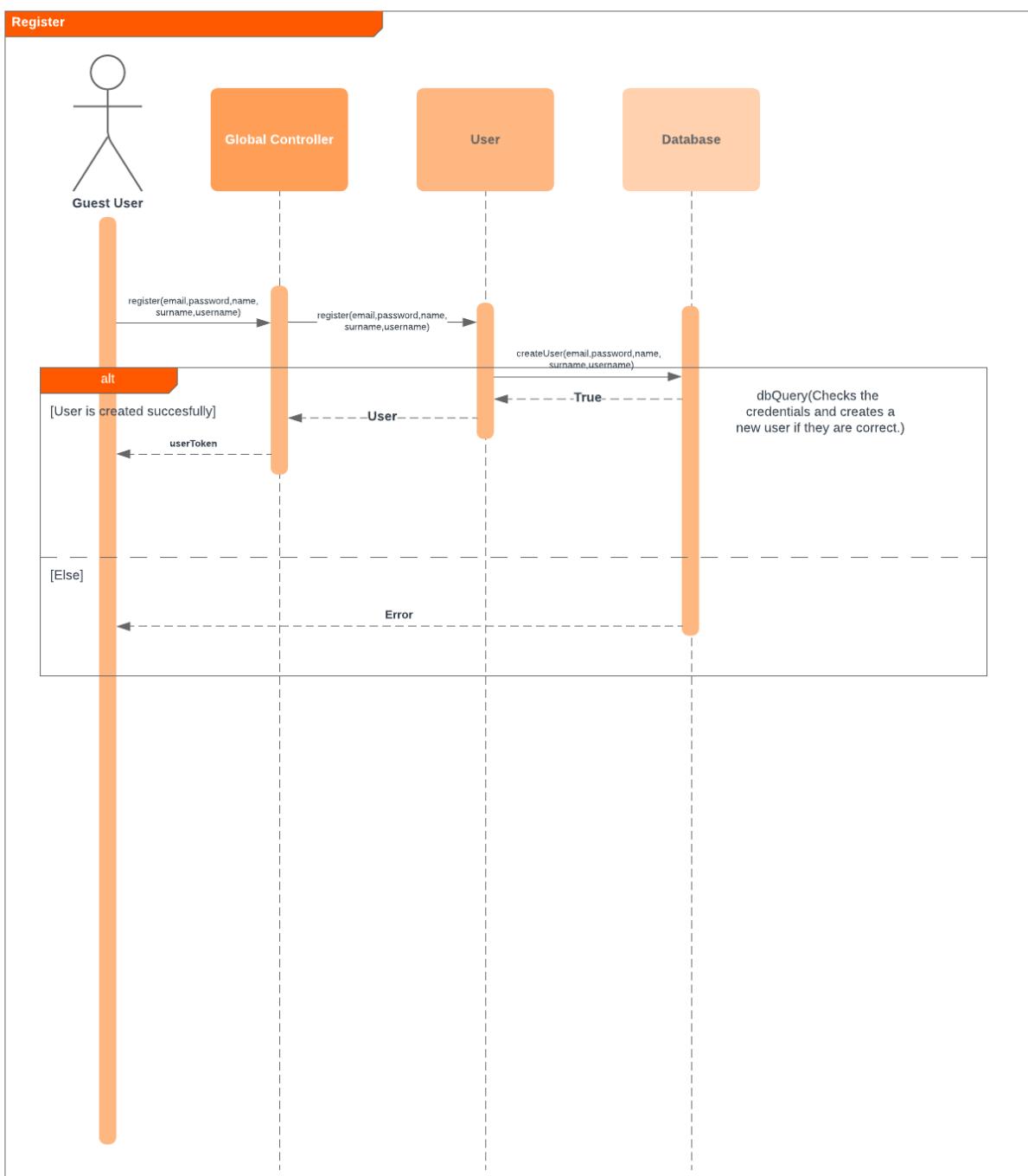
#### 1. Login



## 2. Register

### Register

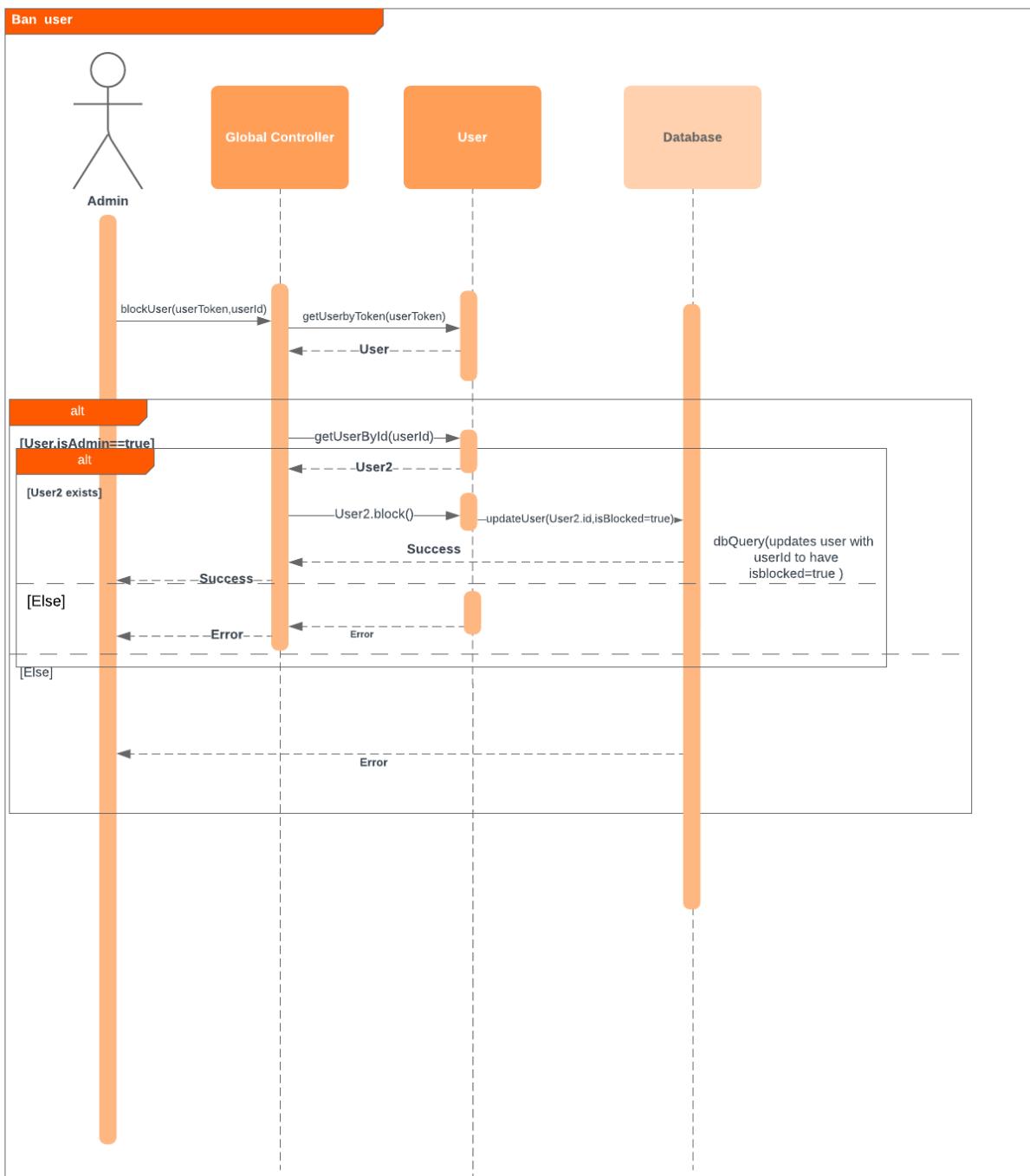
Burhan Can Akkuş | March 25, 2019



### 3. Ban User

#### Ban user

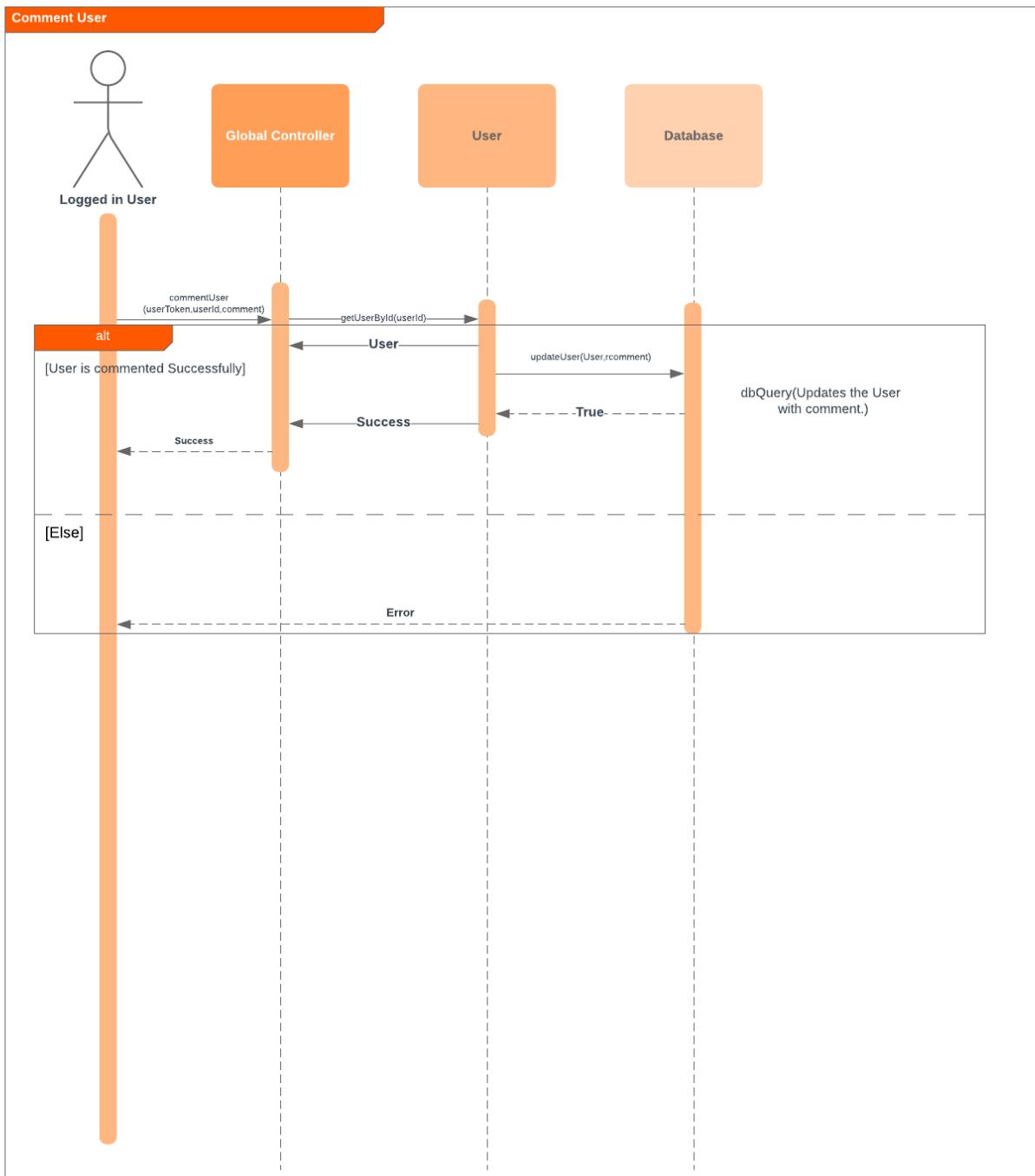
Burhan Can Akkuş | March 25, 2019



#### 4. Comment User

### Comment User

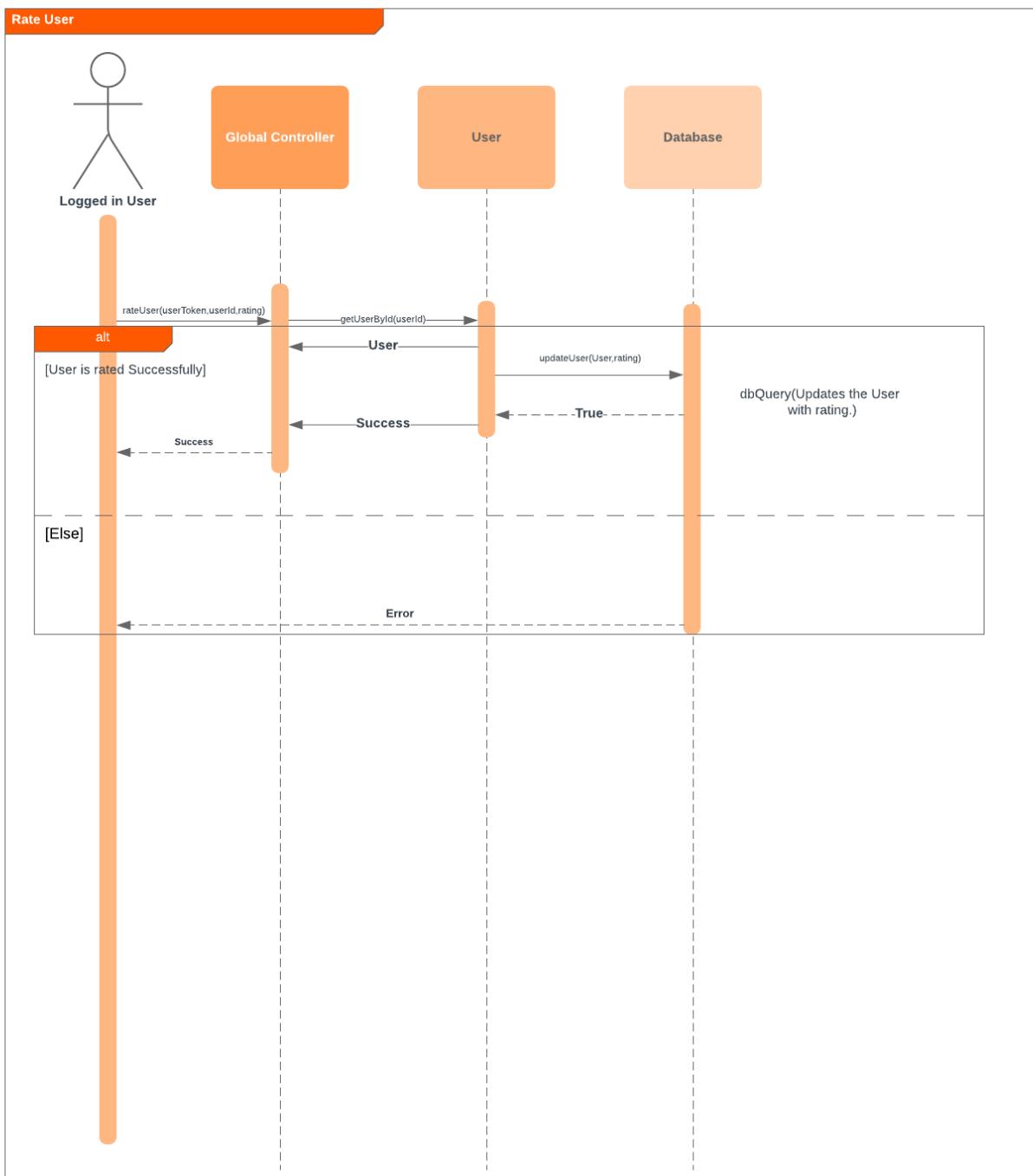
Burhan Can Akkuş | March 25, 2019



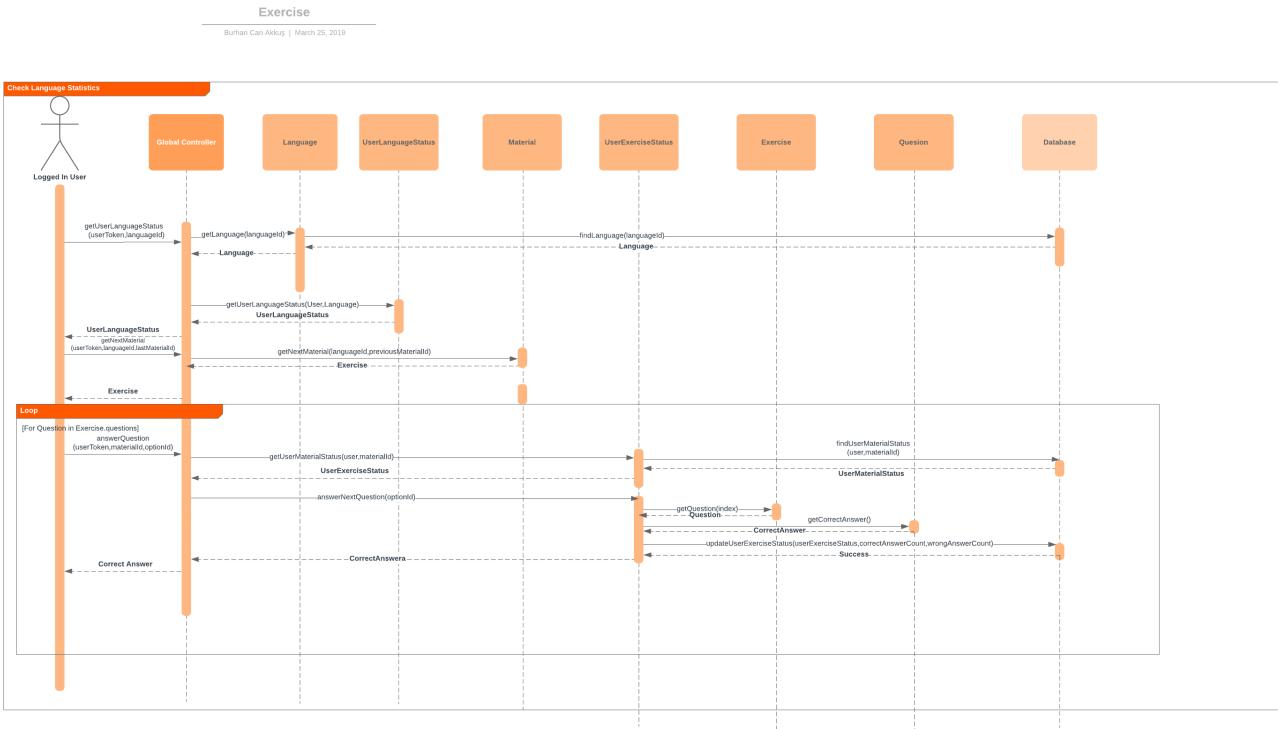
## 5. Rate User

### Rate User

Burhan Can Akkuş | March 25, 2019



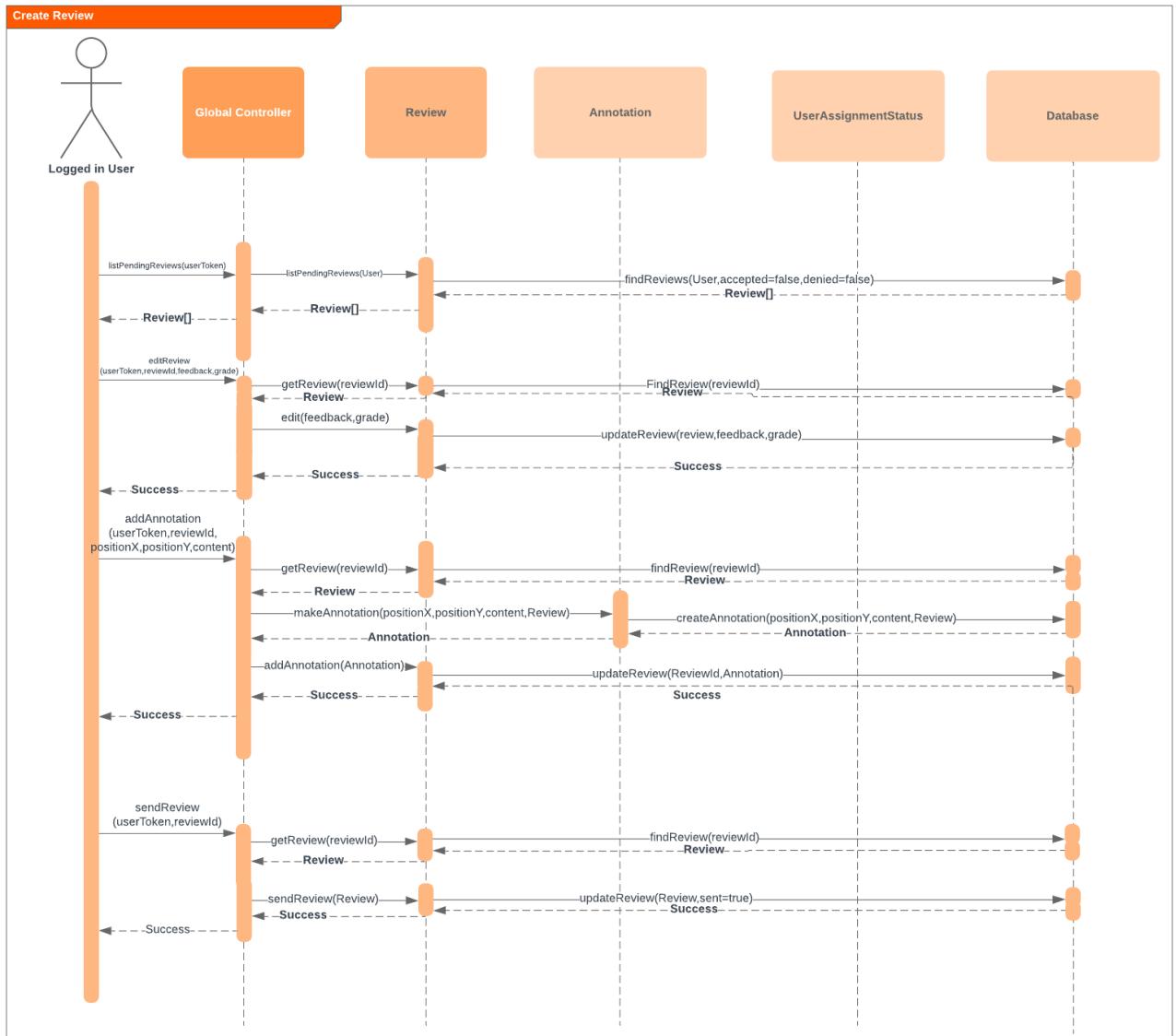
## 6. Exercise



## 7. Review

### Review

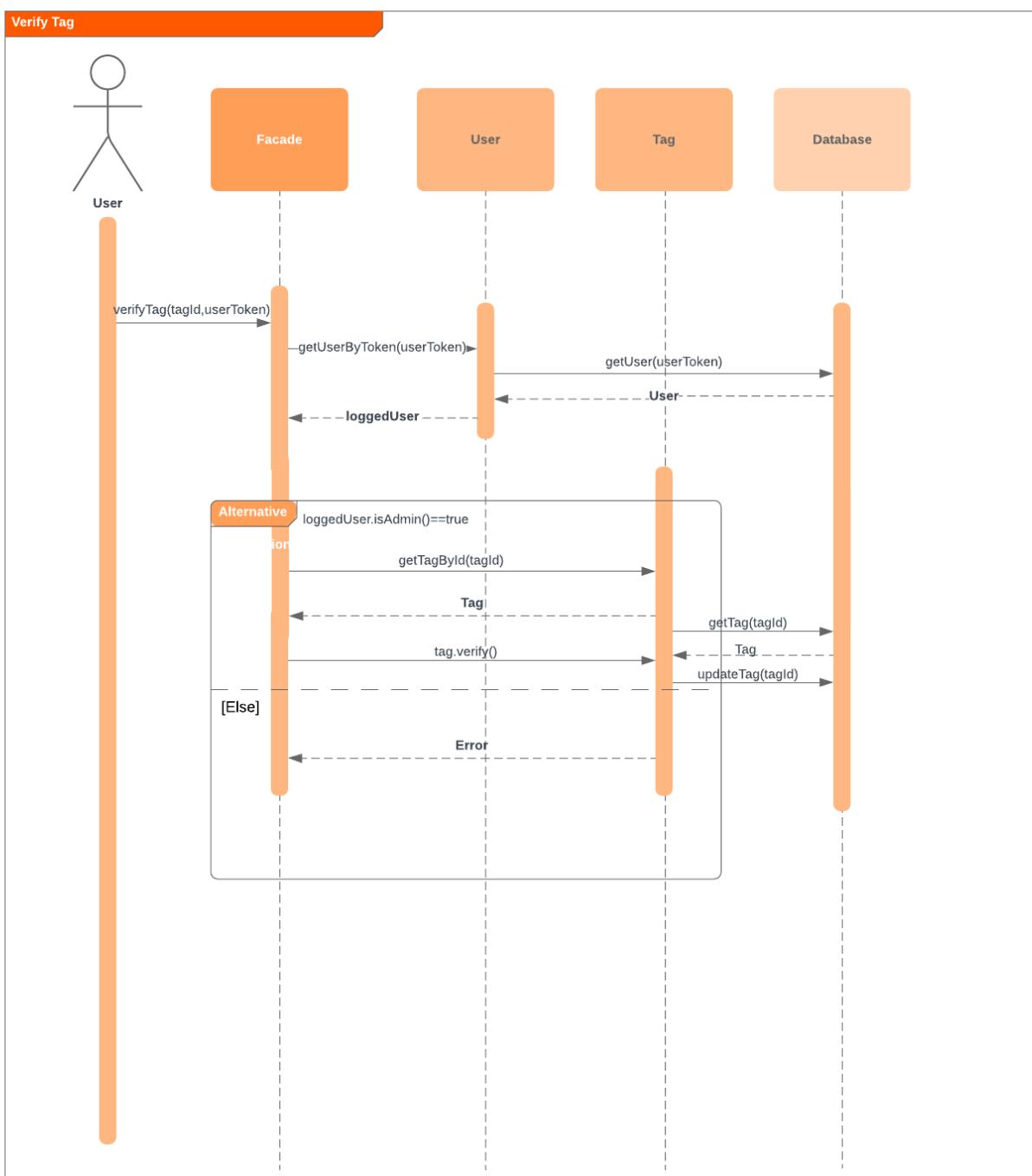
Burhan Can Akkuş | March 25, 2019



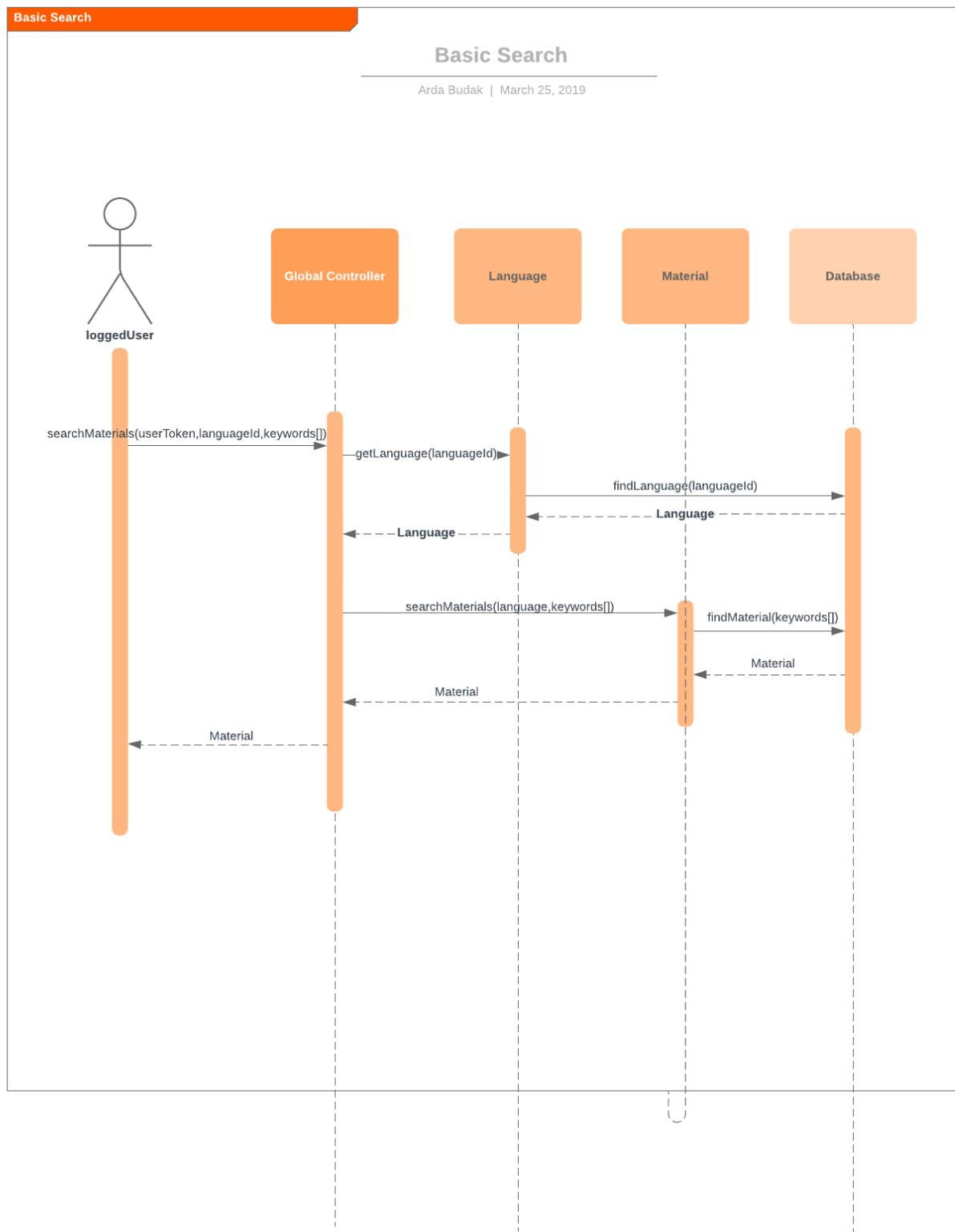
## 8. Verify Tag

### VerifyTag

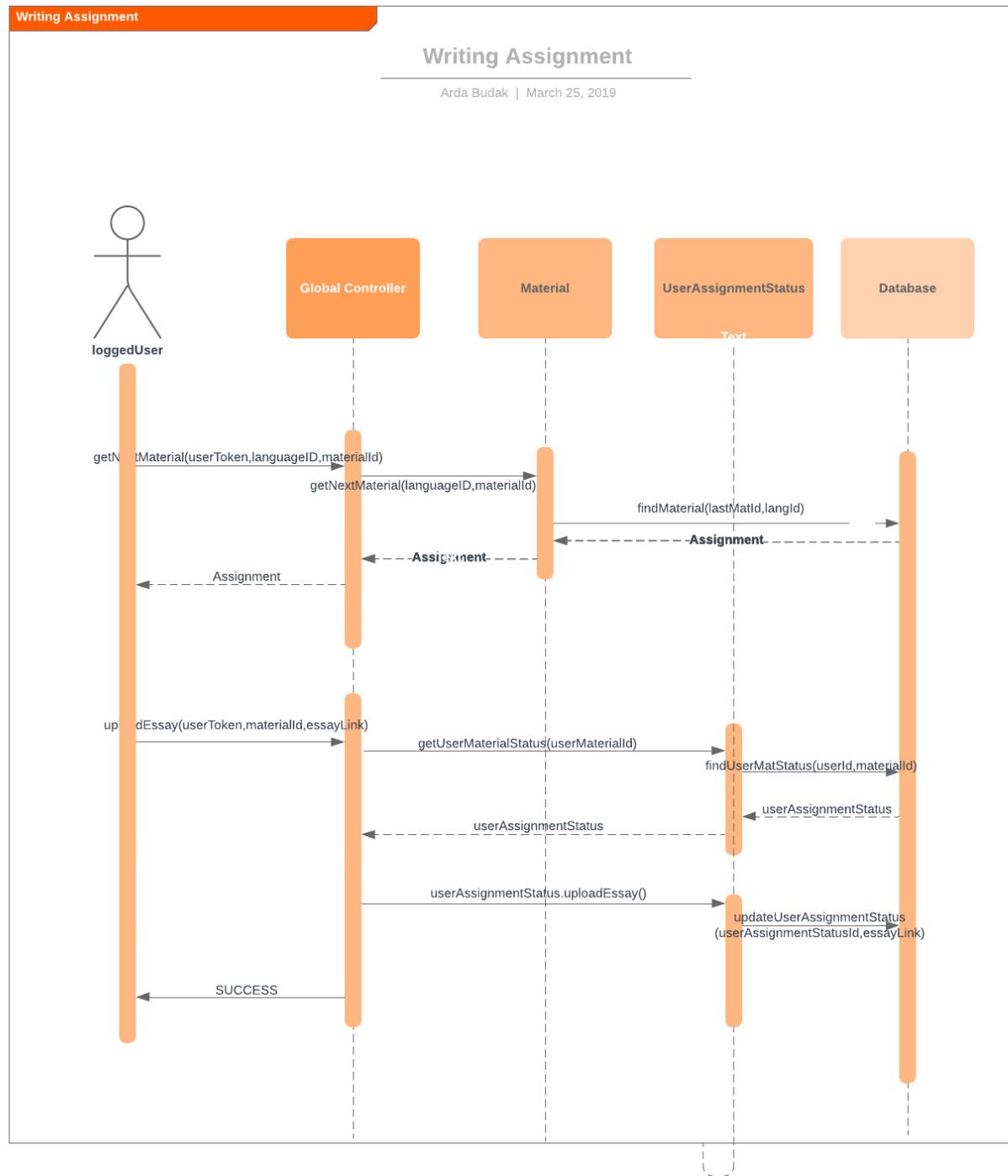
Arda Budak | March 25, 2019



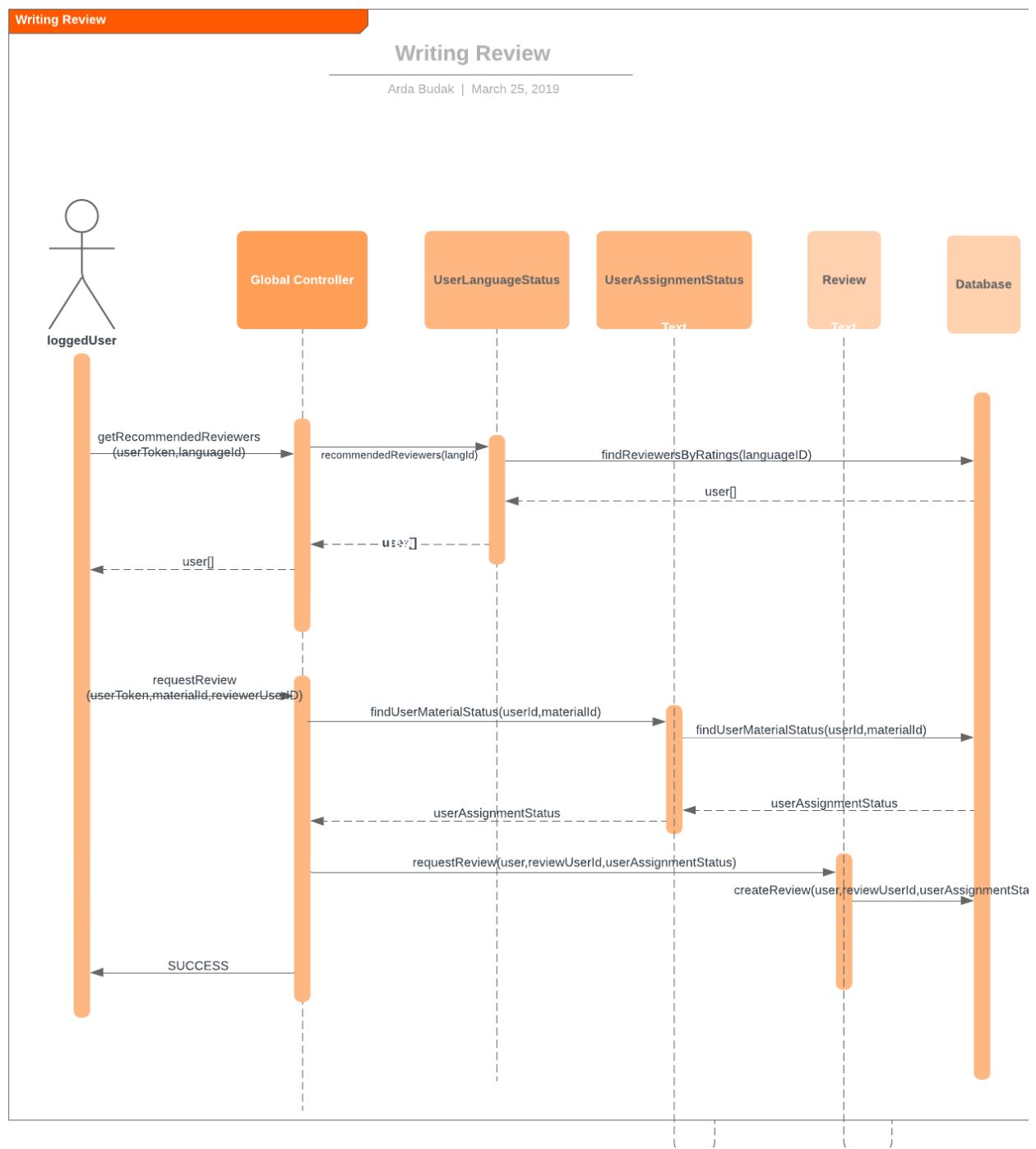
## 9. Basic Search



## 10. Writing Assignment



## 11. Writing Review



### 8.4. Diagram Reviews

#### 8.4.1. Use Case Diagram Review 1

#### Review 1 by Egemen

Hi, I made a list of things that came to my mind, they are by no means the last words and most of them should be considered by looking and/or modifying the diagram and the requirements simultaneously. Very good work :)

1. In the use case `Enter credentials`, do we know that these info are precisely what we want/need, nothing less nothing more? For example, do we need to require the birth date?
2. `Display demo exercises` use case should be detailed.
3. Do `Verify suggested learning materials` get done by the admins or users?
4. `Grade assignments` and `Give feedback` use cases look like they are the `includes` of another use case.
5. `Add suggested tags` may be a different use case on its own.
6. At `See the progress for each language` use case, does it matter that we show all the languages' progress or a single one's? Do we need to emphasize this?
7. `Interact with another user` use case can be demonstrated better if we use another stick figure for the other user so diagram shows an interaction between users, rather than simply reads.
8. We need to make sure that when we say `Reach Learning materials` and `Select ... materials`, we are comfortable with the verbs of action here. These words are very sticky, do we convey the right info when we use them?
9. `Do assignments` use case needs to be under `Writing` use case. Again, we can use another stick figure on that part of the graph.
10. I cannot remember if we talked about `Take exercises about the notes` use case. Is there any exercise for the notes? Should there be?
11. After taking the proficiency exam, what happens? For example, at what point, the learning materials which were not accessible, become so?
12. `Admin user` should be able to interact with other users, should be able to learn a new language. In the [UML Use Case Diagram Tutorial](#), there was a technique which looks like "OO inheritance". We can use that to differentiate between normal users and admins, all the while providing to the admins with every service we already provide to the users.

#### 8.4.2. Use Case Diagram Review 2

### Review 2 by Egemen

1. In `Rate Each Other` use case, it may be better to just say `Rate` or `Give Rating`.
2. I am still unsure about the info we require at the registering process. Also, Google or Facebook sign-ins should be considered.
3. `Get Feedback From An Expert On The Language` use case should be renamed to `Get Grading From Another User`. Where does getting feedback use case fit in, I do not know. Let's not use 'expert' word, and split feedback into grading and feedback. `Rate The Reviewer` and `Comment On The Reviewer`
4. Is `Take Exercises About The Notes` use case necessary, I do not know. If it is not necessary, let us remove it.
5. Maybe `Select A New Language` is more appropriate here. But then, users can only take proficiency at the selection, which is not correct behavior. I am unsure.
6. Can admins learn a language? Can they do or grade assignments? If yes, then diagram must be modified.

#### 8.4.3. Class Diagram Review 1

### Review 1 by Halit

These are the list of things I believe we should talk over to improve the Class Diagram Draft. These questions/suggestions are not final, and will most possibly be proceeded by more reviews.

#### General Structure

1. Why are unidirectional associations used in almost everywhere instead of bidirectional ones.
2. Why are most classes separated into a `normal` version and a `controller` version.
  - 2.1. How about merging `Review` and `ReviewController`?
  - 2.2. How about merging `WritingExercise` and `WritingExerciseController`?
  - 2.3. How about breaking up `LearningMaterialController` and merging its parts with `LearningMaterial`, `Tag` and other classes.

#### Numbers

1. Why are some numbers missing about associations?
  - 1.1. `LanguageController` one to many `Language`

## Diagram / Shapes

1. Why is it that two different ways to represent an arrow head is used? (-> and -►) According to the resources I've checked, they mean the same thing, unidirectional association. If the `composition interaction` was meant, it should be shown as -♦ not as -►

## Typos ?

1. `RegisteredUserController => RegisteredUserController`