



# ANADOLU ÜNİVERSİTESİ

**ENGINEERING FACULTY**

**COMPUTER ENGINEERING**

**BIM423**

**SOFTWARE ENGINEERING**

**FALL TERM SEMESTER PROJECT FINAL REPORT**

**Name:**

**Student ID:**

**Group Number:**

## **Requirement Analysis Report**

### **1. Introduction**

#### **a. Project Title**

ArtWork

#### **b. Project Definition**

Our project is based on android application. The application makes people can learn about artworks, their artist and its history easily. The application send articles everyday about users selected categories. Users can vote it, save that articles for read then. Also, if users want, they can send articles to application and we can share that articles on application.

#### **c. Project Goal**

We aim to give instant information to people and to share information about the art branches which they are interested.

#### **d. Project Scope**

This project involves all curious people who interest in art. Also we think that all people should learn somethings about art history for their knowledge. Our goal is simplify that with this application.

#### **e. Application Areas**

There is no specific area for this application. Everyone can use it if they want to. For example; some people can see this application like a beneficial game, some students can use it for learning, some people can use it for adding articles.

#### **f. Background**

There is some applications on Play Store and App Store about art history. But there is no Turkish version. So we describe Turkish artist. Other difference is our application is read-write application. Users get in this job.

## 2. Team Organization

Name	Task
Yunus Bora Erciyas	Database & Android Backend Developing
Özgür Hasan Aytar	Web API Processing
Murat Kara	Designer
Fatma Kurnaz	Information gathering & GUI Processing
Hasan Nazım Akyol	Android Backend Developer
Ümit Duran	Database & Android Backend Developing

## 3. Project Schedule

### 1. Week

- a. Android Application Structure Design
- b. UI design
  - i. Sign-in page

### 2. Week

- a. UI design
  - i. Art's description and image
- b. Connect project to Firebase

### 3. Week

- a. Database design
- b. UI design
  - i. Logo design
  - ii. Like-unlike buttons design

### 4. Week

- a. Create database and firebase
- b. Information gathering
- c. UI design
  - i. Share and Library buttons
  - ii. Navigation design

#### 5. Week

- a. Database implementation
- b. Android
  - i. Swiping between pages
  - ii. Activating the buttons

#### 6. Week

- a. Android
  - i. User rating system
- b. Creating user's library
  - i. Implementing library

#### 7. Week

- a. UI design
  - i. Sign-in background redesign
  - ii. Some designs improving
- b. Checking implementations

#### 8. Week

- a. Testing

### **4. Process Model**

We choose Agile process model because it is a very realistic approach to software development and easy to manage. It gives flexibility to developers and it is suitable for fixed or changing requirements.

### **5. System Requirement**

#### **a. Functional Requirements**

- Users should have their account in the app which can log in via social media accounts.
- Users should have fill a form about their interests before sign up.
- Users should be able to see new articles about selected categories day by day.
- Users should be able to save articles in their own libraries.
- Users should be able to vote for like/dislike.
- Users should be able to write articles about their interests.

-Users should be able to see percentage like/dislike after click vote buttons.

-Users should be take notifications about new articles and published articles which are belong themselves.

**b. Non-functional Requirements**

**-Performance** : Our program's performance issues will generally depend on Google's Firebase Platform which is providing a real-time experience.

**-Scalability** : Our program will be able to handle 100.000 active user and will provide almost limitless data storage area to look around the favorite pieces of art.

**-Security** : Google's authentication model and tested entry models will be used.

**-Maintainability**: Our Application will be written for Android 4.4 or higher versions. So People those want to use our application should have a phone that operates Android 4.4 or higher.

**-Usability** : Easy-to-use user-friendly swipe-left/right logic will be used and icon and color selections will be for general understanding.

**-Availability** : Easy-to-access and no interruption will be seen. Google Play Store will serve the application to people.

**6. Use Cases**

**a. Usage Scenarios**

-The user registers to the system via Google Play Account.

-The user goes to First Page.

-The user looks other pages.

-The user votes like or unlike.

-The user sees rating votes.

-The user shares the post.

-The user adds to own library.

-The user writes articles about art.

-The administrator checks user's post.

-The administrator publishes user's post.

**b. Use Case Glossary**

**First Page** : Users can see the page related to art.

**Other Pages :** Users can pass the other pages related to art.

**Like or Unlike :** Users can vote with the buttons below the page.

**Rating Votes :** Users can see who liked or unliked.

**Sharing Posts :** Users can share liked posts.

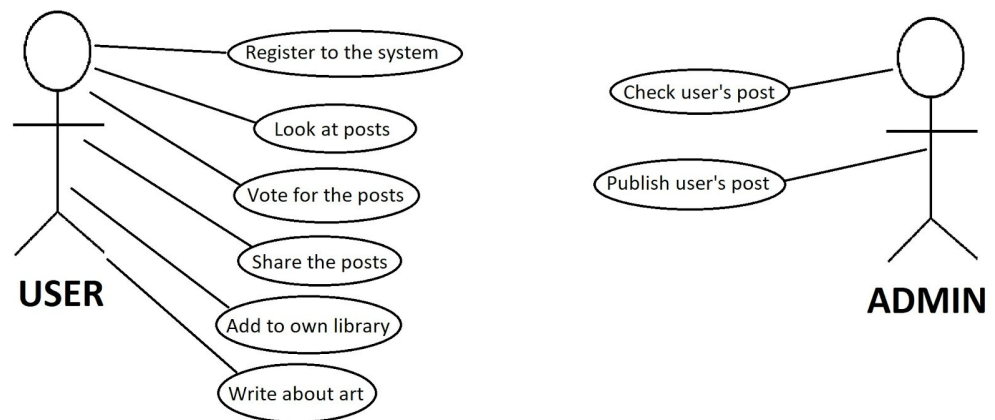
**Library :** Each user can use own library to add something.

**Writing Articles :** Users can write about interested art's branch.

**Checking Post :** Administrators can check and edit users's posts.

**Publishing Post :** Administrators can publish users's posts.

c. Use Case Diagram



d. Use Case Narratives

**Use Case Name :** Register to the System

**Actor :** The user who is not registered to the system

**Description :** The unregistered user opens the application and sign up via Google Play Account

**Use Case Name :** Looking Art Posts

**Actor :** Registered User

**Description :** The registered user reads text and swipes to the left.

**Use Case Name :** Voting Art Posts

**Actor** : Registered User

**Description** : The registered user votes on posts  
“Like” or “Unlike”.

**Use Case Name** : Looking Ratings

**Actor** : Registered User

**Description** : The registered user sees the percentage  
of votes.

**Use Case Name** : Sharing Posts

**Actor** : Registered User

**Description** : The registered user shares post’s text  
via social media accounts.

**Use Case Name** : Adding to Library

**Actor** : Registered User

**Description** : The registered user adds posts to own  
library to look later.

**Use Case Name** : Writing Articles

**Actor** : Registered User

**Description** : The registered user writes articles about art.

**Use Case Name** : Checking Users’s Posts

**Actor** : Administrator

**Description** : The administrator checks and edits  
users’s posts.

**Use Case Name** : Writing Articles

**Actor** : Administrator

**Description** : The administrator publishes user’s post.

## 7. Conclusion

### a. Outstanding Issues

An application for people who are interested in art as a Mobile Application (Android). We accomplished the project goal in the given time. Users can now share and see the daily posts. They can vote for the posts they like or dislike. Users who wants to write about art, they can write about interested art’s branch.