

Doodle Play

Project Proposal Report

Digital Application Distribution Service

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1.Introduction

Our purpose is to describe the content of Digital Application Distribution Service Doodle Play. Our proposal report includes the information about our project Doodle Play, functional and non-functional requirements, limitations and Entity-Relationship Model Diagram of our project Doodle Play.

In description part, the report includes the information about the specifications of Doodle Play and requirements of the digital distribution service.

Requirements part of the report includes the detailed information about functional and non-functional requirements of the project. This requirements part includes the main specifications of the service. In the functional requirements, specifications and procedures of our project are described. On the other hand, usability, reliability, performance, supportability, interface, packaging and legal parts of non-functional requirements are described.

Constraints and restrictions part of the project are in the limitations part. They include that the conditions which the users are limited in the system.

Entity-Relationship diagram of the project is described in conceptual design part of the report. This part includes the fundamental structure of the database system which includes the entities and relationships as a part of the table.

2.Description

Doodle Play is a web based application distribution service. Our services's specifications include all the necessary specifications that other common services already have. Additionally, our service contains monthly payment system and application usage statistics.

Users can download applications to their devices, rate the applications, comment them, subscribe to an application and pay the fees monthly. For the developers, they can add new applications, update them or delete them.

Our service categorizes applications according to their field of use so that the users can easily find the applications they want to use. Accordingly, subcategories can help users to find exactly what they want.

Users can sign in the service using their email and passwords. If the person does not have any account on our service, they can easily create an account just using their emails, passwords and usernames.

Our service helps editors to rate the applications as well. The applications which are rated by the editors can also be viewed as editor rated application.

In an applications page, users can see the rates and comments of other users and can agree or disagree with them.

Each user has library to clearly see which applications they have used previously. Additionally, they can delete or hide the applications in their library.

Our system also provide users to give them wishlist so that each user can add applications into their wishlist in order to try or buy it in the future.

2.1 Why must we use database in Digital Distribution Service ?

In our system, each user and developer has accounts so that our service can contain their emails, passwords and usernames in our database. Moreover, service contains the data of the users' credit card information and their libraries, developers' bank account number for fees and applications are also stored in the database as well as their information like rate, comment. Subscriptions' information must also be stored in database.

2.2 How do we use database in Doodle Play ?

Developers publish their applications to our database so that each user can download them from database. Additionally, Information of applications which are the fact that the developer information, publication date, user and editor rates,

comments, application update dates and changed specs are stored in database. Also they can see the statistics and monthly subscribers.

Users' information such as email, password and username are stored in database. Moreover, credit card information, monthly subscription, previous payments' information are stored in database. As well as information above, users libraries and wishlists' information are stored in database.

3.Functional Requirements

3.1 Digital Distribution Service

- Developers can publish their applications to appropriate categories
- Developers can update their applications or delete them
- Users can download applications into their devices
- Users can delete applications from their devices using service
- Users can add the application to their wishlist
- Users have libraries that store the previously downloaded applications
- Libraries can be modified by the users
- Users can delete or hide games from their libraries
- Users can see their previous payments and monthly subscriptions they have
- Developers can see the number of monthly subscribes they their applications have
- Developers and users can see the number of downloads that applications have
- Developers can send notifications to users about update information
- Editors can check(approve or decline) requests.
- Editors can impose restrictions on the applications.

3.2 Social Service Network

- Users can rate the applications they previously download
- Users can comment applications that they already downloaded
- Users can rate other users' comments
- Users can see editor's rates on applications
- Users can send messages to developers about application
- Developers can answer comments including questions
- Users can comment others' comments
- Users can send friend request to other users
- Users can see their friends' libraries
- Users can be advised to applications that their friends use

4. Non-functional requirements

4.1 Usability

- Users and developers can easily understand and use the service
- If user or developer can not understand specific parts of the system, they can ask questions to each other and us

4.2 Reliability

- The service should always be available
- User and developer emails must be valid and their passwords must be secured enough not to be cracked

4.3 Performance

- All computing assignments about service and database must be fast, time taken must be lower than 1 second
- The service must handle at least 500 account for beginning, and must handle more in the future.

4.4 Supportability

- Users can change the language easily and all common languages must be available
- The application of the service must be easily ported to new platforms and time spent on porting must be minimal

4.5 Interface

- The service must up to date. The information must be updated frequently.

4.6 Packaging

- The service should be accessed on any web browser and applications on any platforms.

4.7 Legal

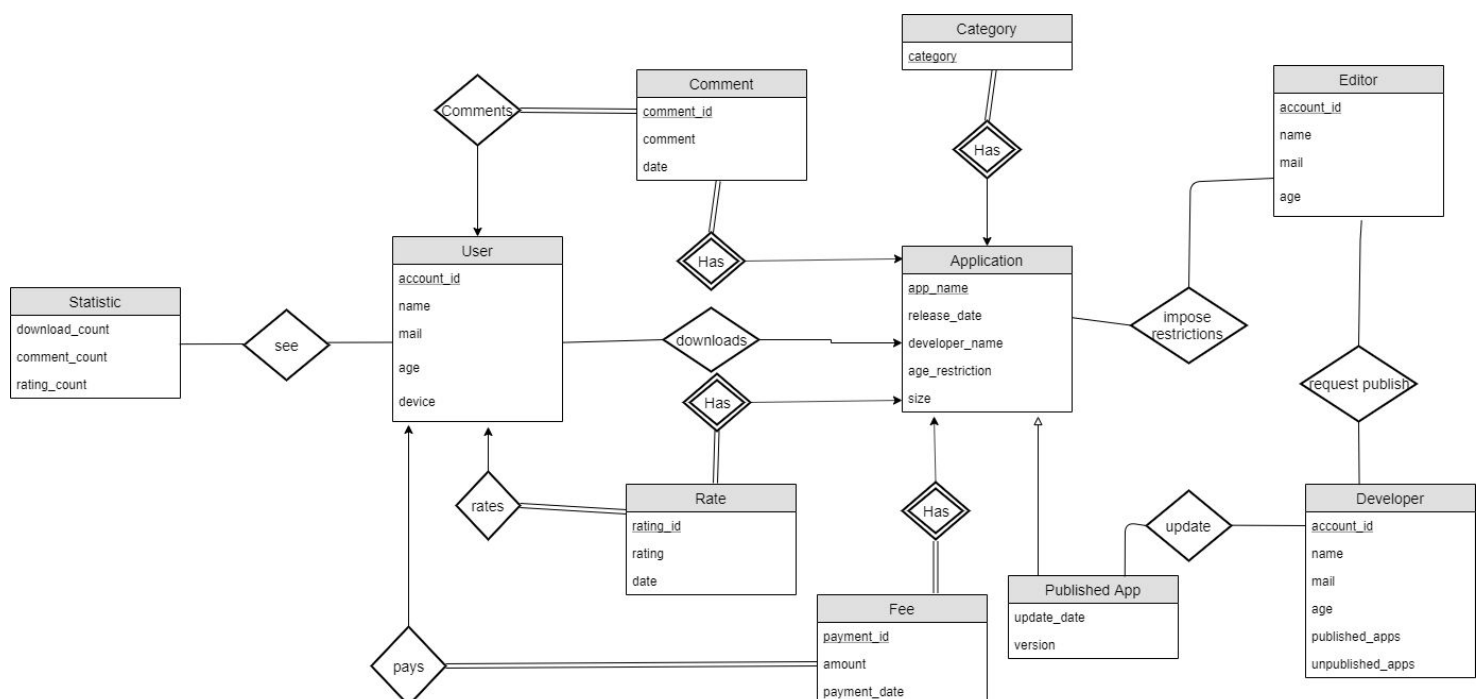
- Creating account should be free for users
- Users must be 18 years old or more to buy or subscribe applications
- The users must sign the terms of service and privacy policy in order to sign in the service.

5. Limitations

There are some limitations to clearly determine the scope of the service

- Users can not rate the applications that they did not download before
- Users cannot comment on the applications that they did not download before
- User can only see the libraries of their friends
- User can not send a message to developers which the user do not download before
- Users must be above 18 to buy or subscribe applications
- Users can not refund the application that the user uses more than 2 hour
- User can not use the non-updated applications which have the upcoming update
- Users can not refund the application that the user previously refunded and bought again

6. Entity-Relationship Model



7. Conclusion

To sum up, Doodle Play is digital distribution platform with social service network. Users can download, buy or subscribe what application they want. Developers can publish their applications to our service. Moreover, users can commit and rate the applications and other user's comments as well as they can ask questions to developers. Friendships can be made within users, and they can have libraries and wishlist.

Detailed information about Doodle Play will be given in the report. All the reports will be in <https://github.com/gorkemyllmaz/CS-353-Fall-2019/reports>