

# Group Project Proposal

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## 1 Team members' responsibility

**Jingying Yin:**

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- Web visualization design, the script of our website

**Yining Zhang:**

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- Build online database, interaction between website and database

## 2 Our data set

We choose the data set of Google Play Store Apps, which is about the app information on Google Play Store. The reason we selected this is that we care about the mobile market for users. As we all know, people use mobile phones every day for several hours. From this data set we want to figure out which features influence the frequency of app download times and app ranking most.

Our data set has 13 columns, they are App's name, category, rating, reviews, size, install times, type of purchase, price, content rating, genres, last update time, current version and android version.

Our data set looks like Figure 1.

App	Category	Rating	Reviews	Size	Installs	Type	Price	Content Rating	Genres	Last Updated	Current Ver	Android Ver
Photo Editor ART_AND_DESI	ART_AND_DESI	4.1	159 19M	10,000+	Free	0	Everyone	Art & Design	7-Jan-18 1.0.0	4.0.3 and up		
Coloring book moana	ART_AND_DESI	3.9	967 14M	500,000+	Free	0	Everyone	Art & Design	15-Jan-18 2.0.0	4.0.3 and up		
U Launcher Lite - FREE Liv	ART_AND_DESI	4.7	87510 8.7M	5,000,000+	Free	0	Everyone	Art & Design	3-Aug-18 1.2.4	4.0.3 and up		
Sketch - Draw ART_AND_DESI	ART_AND_DESI	4.5	215644 25M	50,000,000+	Free	0	Teen	Art & Design	8-Jun-18	Varies with (4.2 and up		
Pixel Draw - ART_AND_DESI	ART_AND_DESI	4.3	967 2.8M	100,000+	Free	0	Everyone	Art & Design	20-Jun-18	1.1 4.4 and up		
Paper Flower ART_AND_DESI	ART_AND_DESI	4.4	167 5.6M	50,000+	Free	0	Everyone	Art & Design	26-Mar-17	1.2.3 and up		
Smoke Effect ART_AND_DESI	ART_AND_DESI	3.8	178 19M	50,000+	Free	0	Everyone	Art & Design	26-Apr-18	1.1 4.0.3 and up		
Infinite Painter ART_AND_DESI	ART_AND_DESI	4.1	36815 29M	1,000,000+	Free	0	Everyone	Art & Design	14-Jun-18 6.1.6.1.1	4.2 and up		
Garden Coloring Book ART_AND_DESI	ART_AND_DESI	4.4	13791 33M	1,000,000+	Free	0	Everyone	Art & Design	20-Sep-17 2.9.2	3.0 and up		
Kids Paint Free - Drawing F ART_AND_DESI	ART_AND_DESI	4.7	121 3.1M	10,000+	Free	0	Everyone	Art & Design	3-Jul-18	2.8 4.0.3 and up		
Text on Photo ART_AND_DESI	ART_AND_DESI	4.4	13880 28M	1,000,000+	Free	0	Everyone	Art & Design	27-Oct-17 1.0.4	4.1 and up		
Name Art Photo ART_AND_DESI	ART_AND_DESI	4.4	8788 12M	1,000,000+	Free	0	Everyone	Art & Design	31-Jul-18 1.0.15	4.0 and up		
Tattoo Name ART_AND_DESI	ART_AND_DESI	4.2	44829 20M	10,000,000+	Free	0	Teen	Art & Design	2-Apr-18	3.8 4.1 and up		
Mandala Color ART_AND_DESI	ART_AND_DESI	4.6	4326 21M	100,000+	Free	0	Everyone	Art & Design	26-Jun-18 1.0.4	4.4 and up		
3D Color Flax ART_AND_DESI	ART_AND_DESI	4.4	1518 37M	100,000+	Free	0	Everyone	Art & Design	3-Aug-18 1.2.3	2.3 and up		
Learn To Draw ART_AND_DESI	ART_AND_DESI	3.2	55 2.7M	5,000+	Free	0	Everyone	Art & Design	6-Jun-18 NaN	4.2 and up		
Photo Design ART_AND_DESI	ART_AND_DESI	4.7	3632 5.5M	500,000+	Free	0	Everyone	Art & Design	31-Jul-18	3.1 4.1 and up		
350 Diy Room ART_AND_DESI	ART_AND_DESI	4.5	27 17M	10,000+	Free	0	Everyone	Art & Design	7-Nov-17	1.2.3 and up		
FlipaClip - Draw ART_AND_DESI	ART_AND_DESI	4.3	194216 39M	5,000,000+	Free	0	Everyone	Art & Design	3-Aug-18 2.2.5	4.0.3 and up		
ibis Paint X ART_AND_DESI	ART_AND_DESI	4.6	224399 31M	10,000,000+	Free	0	Everyone	Art & Design	30-Jul-18 5.5.4	4.1 and up		
Logo Maker ART_AND_DESI	ART_AND_DESI	4	450 14M	100,000+	Free	0	Everyone	Art & Design	20-Apr-18	4.1 and up		
Boys Photo Editor ART_AND_DESI	ART_AND_DESI	4.1	654 12M	100,000+	Free	0	Everyone	Art & Design	20-Mar-18	1.1 4.0.3 and up		
Superheroes ART_AND_DESI	ART_AND_DESI	4.7	7699 4.2M	500,000+	Free	0	Everyone 10+	Art & Design	12-Jul-18 2.2.6.2	4.0.3 and up		
McQueen Color ART_AND_DESI NaN	ART_AND_DESI NaN	61	7.0M	100,000+	Free	0	Everyone	Art & Design	7-Mar-18 1.0.0	4.1 and up		
HD Mickey Mouse ART_AND_DESI	ART_AND_DESI	4.7	118 23M	50,000+	Free	0	Everyone	Art & Design	7-Jul-18 1.1.3	4.1 and up		
Harley Quinn ART_AND_DESI	ART_AND_DESI	4.8	192 6.0M	10,000+	Free	0	Everyone	Art & Design	25-Apr-18	1.5 3.0 and up		
Colorfit - Draw ART_AND_DESI	ART_AND_DESI	4.7	20260 25M	500,000+	Free	0	Everyone	Art & Design	11-Oct-17 1.0.8	4.0.3 and up		
Animated Photo ART_AND_DESI	ART_AND_DESI	4.1	203 6.1M	100,000+	Free	0	Everyone	Art & Design	21-Mar-18	1.03 4.0.3 and up		
Pencil Sketch ART_AND_DESI	ART_AND_DESI	3.9	136 4.6M	10,000+	Free	0	Everyone	Art & Design	12-Jul-18	6.2.3 and up		
Easy Realistic ART_AND_DESI	ART_AND_DESI	4.1	223 4.2M	100,000+	Free	0	Everyone	Art & Design	22-Aug-17	1.2.3 and up		
Pink Silver Beauty ART_AND_DESI	ART_AND_DESI	4.2	1120 9.2M	100,000+	Free	0	Everyone	Art & Design	12-Jul-18 6.7.12.2018	4.0.3 and up		
Art Drawing ART_AND_DESI	ART_AND_DESI	4.1	227 5.2M	50,000+	Free	0	Everyone	Art & Design	31-May-18	1.2 2.3 and up		
Anime Manga ART_AND_DESI	ART_AND_DESI	4.5	5035 11M	100,000+	Free	0	Everyone	Art & Design	19-Jul-18	2.2 4.0 and up		

Figure 1: the overview of data set: Google Play Store Apps

The link of the data set: <https://www.kaggle.com/lava18/google-play-store-apps>

### 3 Our website designs

Our website is an online data analyst website. We decide to develop 2 pages to show different attribute.

The First page (Figure 2), the users can view all the data details on the front page as shown below. In this page, the users also can find the description and some simple statistical result of each features. Also, they can sort the data by different features and can use filters to find one or more specific data. On the top of this page there will be a little button, from this users can go to next page.

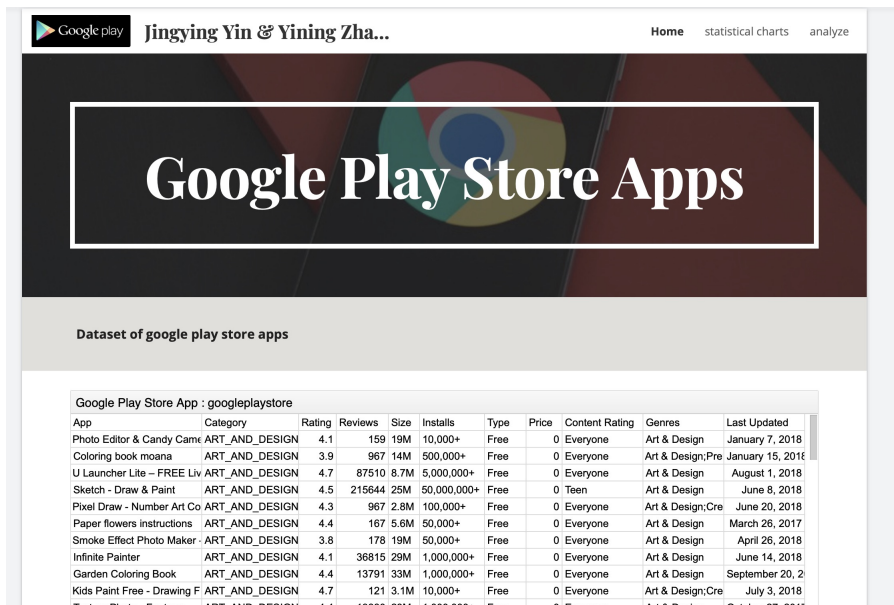


Figure 2: the front page of our website

The second page (Figure 3), this is a more professional page. The user can find some analyze of our data set here, about the distribution of each features, relationship between each 2 features, relevant matrix and they even can draw simple regression among two features. App developers can find advisement for their further development through the consumer behavior from our website.



Figure 3: the statistics page of the data set

The third page (Figure 4), scatter plots and description of regression function will be shown here. Scatter plots show the tendency of two features in the dataset which can help users to predict the mathematical relationship between features. The regression functions show users how one exact feature in the dataset can be explained by other features.

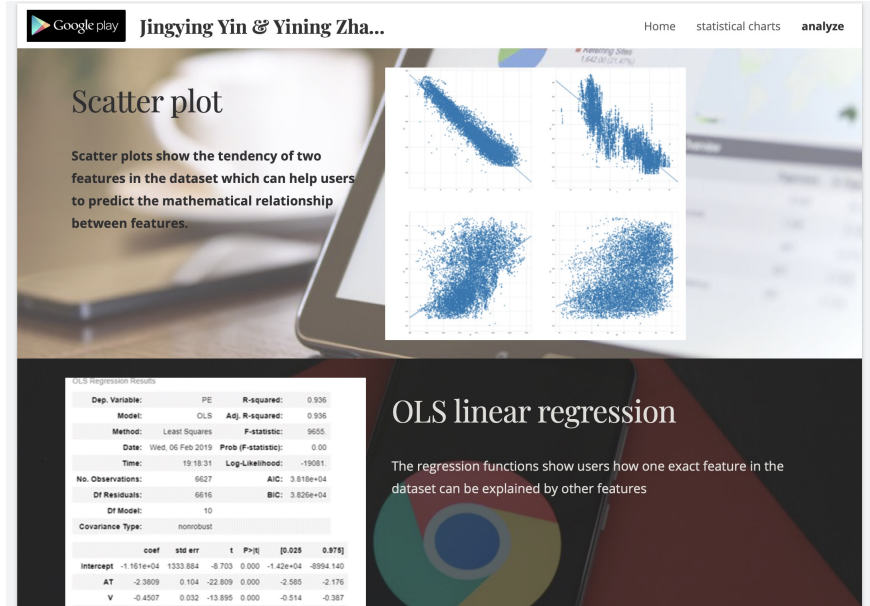


Figure 4: the analyst page of the data set

## 4 Programming language

We use HTML, java script, java to achieve the website UI and the interaction between our website and database.

Also, we choose relational database, such as mySQL as our online database.

## 5 Timeline for our project

Table 1: Milestone schedule

Timeline	tasks
9.18,2019	Finish our proposal
9.28,2019	Build our online database
10.8,2019	Website UI
10.18,2019	Show the data set on the front page
10.28,2019	Build models for the analysis locally
11.8,2019	Analyze the data and draw charts and graphs
11.18,2019	Show the analyze results on the website
11.28,2019	Show charts and graphs on the website
11.30,2019	Test all the features of our website
12.2,2019	Submit our group project