

Data Exploration

Data Set Overview

The table below lists each of the files available for analysis with a short description of what is found in each one.

File Name	Description	Fields
ad-clicks.csv	A line is added to this file when a player clicks on an advertisement in the Flamingo app.	<ul style="list-style-type: none">➤ timestamp: when the click occurred.➤ txId: a unique id (within ad-clicks.log) for the click➤ sessionId: the id of the user session for the user who made the click➤ teamid: the current team id of the user who made the click➤ userid: the user id of the user who made the click➤ adId: the id of the ad clicked on➤ adCategory: the category/type of ad clicked on
buy-clicks.csv	A line is added to this file when a player makes an in-app purchase in the Flamingo app.	<ul style="list-style-type: none">➤ timestamp: when the purchase was made.➤ txId: a unique id (within buy-clicks.log) for the purchase➤ sessionId: the id of the user session for the user who made the purchase➤ team: the current team id of the user who made the purchase➤ userId: the user id of the user who made the purchase➤ buyId: the id of the item purchased➤ price: the price of the item purchased
game-clicks.csv	A line is added to this file each time a user performs a click in the game.	<ul style="list-style-type: none">➤ timestamp: when the click occurred.➤ clickId: a unique id for the click.➤ userId: the id of the user performing the click.➤ sessionId: the id of the session of the user when

		<p>the click is performed.</p> <ul style="list-style-type: none"> ➤ isHit: denotes if the click was on a flamingo (value is 1) or missed the flamingo (value is 0) ➤ teamId: the id of the team of the user ➤ teamLevel: the current level of the team of the user
level-events.csv	A line is added to this file each time a team starts or finishes a level in the game.	<ul style="list-style-type: none"> ➤ timestamp: when the event occurred. ➤ eventId: a unique id for the event ➤ teamId: the id of the team ➤ teamLevel: the level started or completed ➤ eventType: the type of event, either start or end
team.csv	This file contains a line for each team terminated in the game.	<ul style="list-style-type: none"> ➤ teamId: the id of the team ➤ name: the name of the team ➤ teamCreationTime: the timestamp when the team was created ➤ teamEndTime: the timestamp when the last member left the team ➤ strength: a measure of team strength, roughly corresponding to the success of a team ➤ currentLevel: the current level of the team
team-assignments.csv	A line is added to this file each time a user joins a team. A user can be in at most a single team at a time.	<ul style="list-style-type: none"> ➤ timestamp: when the user joined the team. ➤ team: the id of the team ➤ userId: the id of the user ➤ assignmentId: a unique id for this assignment
users.csv	This file contains a line for each user playing the game.	<ul style="list-style-type: none"> ➤ timestamp: when user first played the game. ➤ userId: the user id assigned to the user. ➤ nick: the nickname chosen by the user.

		<ul style="list-style-type: none"> ➤ twitter: the twitter handle of the user. ➤ dob: the date of birth of the user. ➤ country: the two-letter country code where the user lives.
user-session.csv	Each line in this file describes a user session, which denotes when a user starts and stops playing the game. Additionally, when a team goes to the next level in the game, the session is ended for each user in the team and a new one started.	<ul style="list-style-type: none"> ➤ timestamp: a timestamp denoting when the event occurred. ➤ userSessionId: a unique id for the session. ➤ userId: the current user's ID. ➤ teamId: the current user's team. ➤ assignmentId: the team assignment id for the user to the team. ➤ sessionType: whether the event is the start or end of a session. ➤ teamLevel: the level of the team during this session. ➤ platformType: the type of platform of the user during this session.

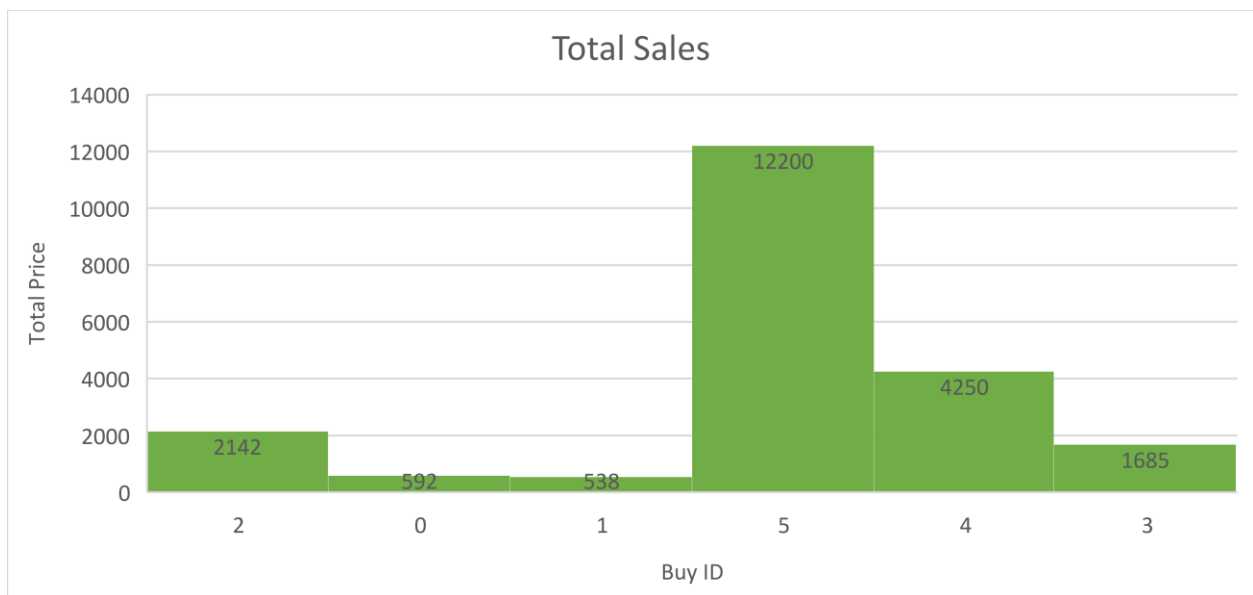
Aggregation

Amount spent buying items	21407
Number of unique items available to be purchased	6

A histogram showing how many times each item is purchased:

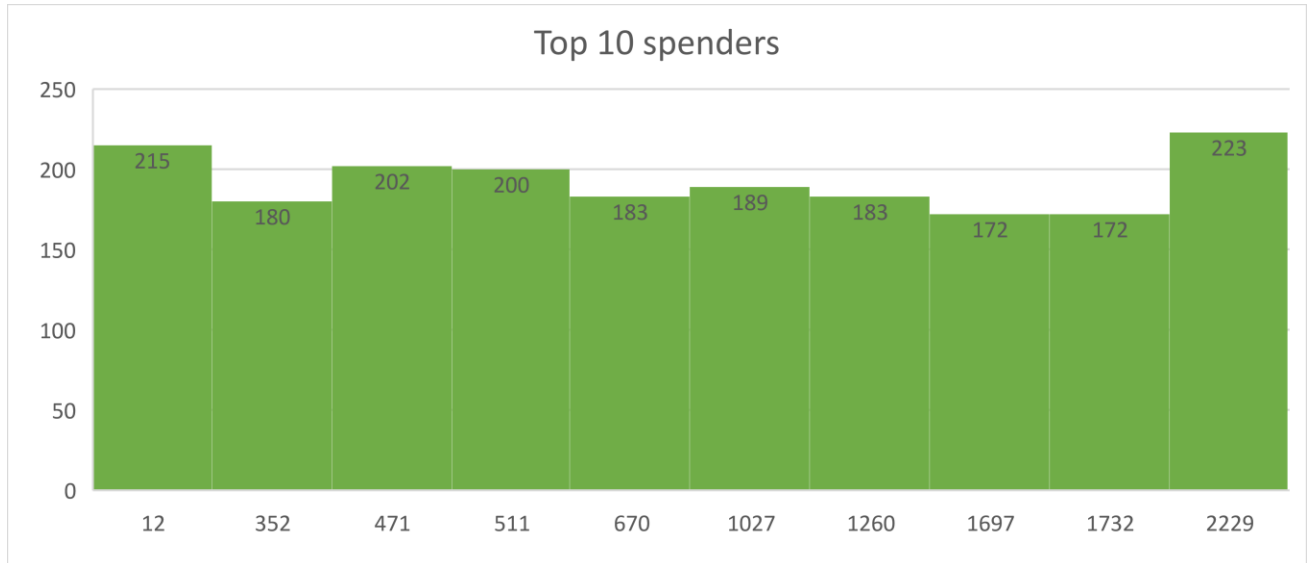


A histogram showing how much money was made from each item:



Filtering

A histogram showing total amount of money spent by the top ten users (ranked by how much money they spent).



The following table shows the user id, platform, and hit-ratio percentage for the top three buying users:

Rank	User Id	Platform	Hit-Ratio (%)
1	229	iphone	11.60
2	12	iphone	13.07
3	471	iphone	14.50