CPSC 304 Project Cover Page

Milestone #: 4

Date: Apr 3

Group Number: 8

Name	Student Number	CS Alias (Userid)	Preferred E-mail Address
Kat Duangkham	31579329	i7g3b	katduangkham@yahoo.ca
Chanaldy Soenarjo	58643727	l1c0s	chsoenarjo@gmail.com
Glen Ren	76331917	u8u1x	glenrenzh@gmail.com

By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your email address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

a. A short description of the final project, and what it accomplished.

Our final project is a website where multiple people can keep track of and catalog video games. A user can make an account and look up other users via their usernames. Anyone can add video games to the database by submitting information, as well as add developers and developer teams. Our project accomplished the ability to store, delete and sort different video

games and see what other users have played. Users can also search the various teams, games, DLCs, reviews, etc., while filtering for any desired condition. Users are also able to find out who owns every game in the database.

- b. A description of how your final schema differed from the schema you turned in.
- i. If the final schema differed, explain why. Note that turning in a final schema that's different from what you planned is fine, we just want to know what changed and why.

The primary keys of many of the tables were the same. We renamed the primary keys to be more specific to the table that held them, allowing for easier programming. We removed MakesReviewReviewing3 because there was an insertion anomaly since the FD it was preserving was already implicitly preserved.

c. A copy of the schema and screenshots that show what data is present in each relation after the SQL script from item #2 is run.

Dev(<u>DevName</u>, Website)

Dev

DEVNAME	WEBSITE
Ryota Niitsuma	<u>Visit site</u>
Tomohiko Imanishi	<u>Visit site</u>
Azusa Shimada	<u>Visit site</u>
Davor Hunski	<u>Visit site</u>
Yohei Shimbori	<u>Visit site</u>
Atsushi Kitajoh	<u>Visit site</u>
Takuji Kawano	<u>Visit site</u>
Hiromi Sagara	<u>Visit site</u>
Oguchi	<u>Visit site</u>
Yusuke Kozaki	<u>Visit site</u>
Toru Narihiro	<u>Visit site</u>
Hitoshi Yamagami	<u>Visit site</u>
Hiroki Morishita	<u>Visit site</u>
Keiichi Okabe	<u>Visit site</u>
Yoshinori Kawamoto	<u>Visit site</u>
Keigo Hoashi	<u>Visit site</u>
Ryo Onishi	<u>Visit site</u>
Takashi Wagatsuma	<u>Visit site</u>
Misa Yasui	<u>Visit site</u>
Takahiro Kitagawa	<u>Visit site</u>

 $\mathsf{Producer}(\underline{\textbf{DevName}})$

Producer

DEVNAME
Davor Hunski
Hitoshi Yamagami
Ryota Niitsuma
Toru Narihiro
Yohei Shimbori

Composer(<u>DevName</u>, Genre, Instrument)

Composer

DEVNAME	GENRE	INSTRUMENT
Atsushi Kitajoh	Jazz	Varied
Hiroki Morishita	Battle	Varied
Keiichi Okabe	Battle	Varied
Yoshinori Kawamoto	Battle	Varied
Keigo Hoashi	Battle	Varied

ArtDesign (**DevName**, ArtistRole, Style)

ArtDesign

DEVNAME	ARTISTROLE	STYLE
Azusa Shimada	Lead 2D character design	anime
Takuji Kawano	Character Concept Artist	anime
Hiromi Sagara	Character Concept Artist	anime
Oguchi	Character Designer	anime
Yusuke Kozaki	Character Designer	anime

Programmer (**<u>DevName</u>**, Task)

Programmer

DEVNAME	TASK
Tomohiko Imanishi	Chief Programmer
Ryo Onishi	Lead Programmer
Takashi Wagatsuma	Game Programmer
Misa Yasui	System Programmer
Takahiro Kitagawa	Sound Programmer

Publisher (<u>PublisherName</u>, Location, Employees)

Publisher

PUBLISHERNAME	LOCATION	EMPLOYEES
Sega	Tokyo, Japan	3459
Devolver Digital	Texas, US	235
Bandai Namco Entertainment	Tokyo, Japan	710
Square Enix	Tokyo, Japan	4712
Annapurna Interactive	California, USA	25
Maddy Makes Games	null	10

${\tt DevTeam} \ (\underline{{\tt DevTeamName}}, \ {\tt Employees}, \ {\tt Location})$

DevTeam

DEVTEAMNAME	EMPLOYEES	LOCATION
Atlus	338	Tokyo, Japan
Croteam	42	Zagreb, Croatia
Bandai Namco Studios Inc.	1219	Tokyo, Japan
Arc System Works	180	Yokohama, Japan
Maddy Makes Games	10	null

AssociatedWith (**DevTeamName**, **PublisherName**)

AssociatedWith

DEVTEAMNAME	PUBLISHERNAME	
Arc System Works	Bandai Namco Entertainment	
Atlus	Sega	
Bandai Namco Studios Inc.	Bandai Namco Entertainment	
Croteam	Devolver Digital	
Maddy Makes Games	Maddy Makes Games	

Includes (**DevTeamName**, **DevName**)

Includes

DEVTEAMNAME	DEVNAME
Atlus	Azusa Shimada
Atlus	Ryota Niitsuma
Atlus	Tomohiko Imanishi
Bandai Namco Studios Inc.	Yohei Shimbori
Croteam	Davor Hunski

Platform (<u>PlatformName</u>, Type)

Platform

PLATFORMNAME	TYPE
Steam	PC
Nintendo Switch	Console
Play Store	Mobile
3DS	Portable
Playstation 5	Console

VideoGameMadeBy (GID, Name, Release, Price, Category, DevTeamName)

VideoGameMadeBy

GID	NAME	RELEASEDATE	PRICE	CATEGORY	DEVTEAMNAME
216878	Persona 3: Reload	02-FEB-24	69.99	RPG	Atlus
1382330	Persona 5 Strikers	22-FEB-21	79.99	RPG	Atlus
257510	The Talos Principle	04-DEC-14	36.99	Puzzle	Croteam
1778820	TEKKEN 8	25-JAN-24	93.49	Fighting	Bandai Namco Studios Inc.
101945	Dragon Ball	26-JAN-18	59.99	Fighting	Arc System Works
504230	Celeste	25-JAN-18	25.99	Platformer	Maddy Makes Games

$PlayedOn~(\underline{\textbf{GID}},~\underline{\textbf{PlatformName}})$

PlayedOn

GID	PLATFORMNAME
101945	Steam
216878	Steam
257510	Steam
504230	Nintendo Switch
1382330	Nintendo Switch
1778820	Steam

ContainsDLC (**GID**, DLCName, Price, Release)

ContainsDLC

GID	DLCNAME	PRICE	RELEASEDATE
101945	Dragon Ball FighterZ: Broly	4.99	28-MAR-18
101945	Dragon Ball FighterZ: Android 21 (Lab Coat)	4.99	23-FEB-22
101945	Dragon Ball FighterZ: Vegito (SSGSS)	4.99	31-MAY-18
101945	Dragon Ball FighterZ: Bardock	4.99	28-MAR-18
101945	Dragon Ball FighterZ: Goku (Ultra Instinct)	4.99	21-MAY-20

Account (<u>Username</u>, Email, DisplayName, Creation)

Account

USERNAME	EMAIL	DISPLAYNAME	CREATIONDATE
dkos	dkos1884 @email.com	Salvation	14-FEB-23
popcornman	ilovemovies @office.ca	SilentWatcher	08-JAN-23
dreamindream	inception @inception.com	LucidDreamer	08-JUL-10
heronboy	ghilblilover @live.com	Heron	08-DEC-23
mobius	ahoy @gmail.com	Polybius	08-SEP-17

 $\text{Adds }(\underline{\textbf{Username}},\,\underline{\textbf{GID}},\,\text{Status})$

Adds

USERNAME	GID	STATUS
dkos	216878	playing
popcornman	1382330	complete
dreamindream	257510	backlog
dreamindream	216878	backlog
heronboy	216878	complete
heronboy	1778820	playing
heronboy	101945	playing
mobius	101945	playing
mobius	216878	complete
mobius	257510	backlog
mobius	504230	backlog
mobius	1382330	backlog
mobius	1778820	backlog

MakesReviewReviewing2 (Length, Category)

MakesReviewReviewing2

LENGTH	CATEGORY
0	Short
300	Medium
200	Medium
50	Short
1000	Long
400	Medium

MakesReviewReviewing1 (ReviewID, Review, Rating, Length, Username, GID)

MakesReviewReviewing1

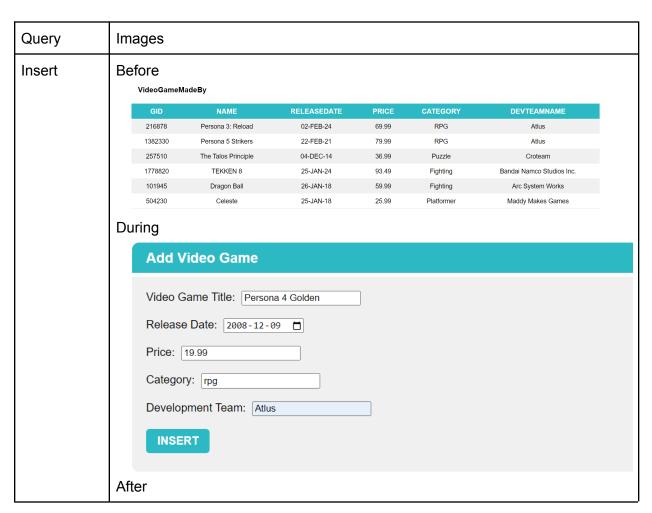
REVIEWID	REVIEWDATE	RATING	LENGTH	USERNAME	GID
2341	18-FEB-23	2	300	dkos	216878
8766	28-NOV-21	2	400	dreamindream	216878
8767	02-SEP-24	5	50	heronboy	216878
1234	05-SEP-23	4	200	popcornman	1382330
5756	27-MAY-19	5	50	dreamindream	257510
5757	10-AUG-18	2	50	mobius	257510
1304	13-AUG-20	4	1000	heronboy	1778820
1305	12-SEP-19	5	1000	mobius	1778820
8765	14-OCT-21	5	400	mobius	101945
8764	20-JUL-22	3	200	heronboy	101945

- i. Do not use DDL statements for this deliverable. List the relational schemas with the primary key attributes underlined and foreign keys bolded. For example, Student(sid, name, dob).
- ii. You can complete this deliverable with screenshots from SQL Plus or create a representation of your relational instances through a spreadsheet program. No matter what you use, be sure to clearly label which relation a given instance refers to.
- d. A list of all SQL queries used and where it can be found in the code (i.e., file name and line number(s)). For SQL query requirements, check the rubric listed on Canvas for Milestone 4.

Query	File and line number.
Insert	Dml.php 5-16
Delete	Dml.php 47
Update	Dml.php 58-63
Selection	Query.php 95-123 and 53-82
Projection	Query.php 95-123
Join	Query.php 53-93 and 107-123

Division	Query.php 564-573
Aggregation with Group By	Games.php 152-155 (another at 62-64, 72)
Aggregation with Having	Games.php 66-72
Nested Aggregation with Group By	Devteam.php 60-66

- e. Screenshots demonstrating the functionality of each query using the GUI. We want to see a before/during/after progression of events. For example, the before screenshot would be what data is in the table before you run the query, the during screenshot(s) is how the query is triggered using the GUI, and the after screenshot is what data is in your table afterwards. Please label each set of screenshots with the name of the query it is meant to address (e.g., "Insert Operation")
- i. You need only to include screenshots for the required queries if you implemented more than what was required, screenshots are not needed for those extra queries.



VideoGameMadeBy

GID	NAME	RELEASEDATE	PRICE	CATEGORY	DEVTEAMNAME
216878	Persona 3: Reload	02-FEB-24	69.99	RPG	Atlus
1382330	Persona 5 Strikers	22-FEB-21	79.99	RPG	Atlus
257510	The Talos Principle	04-DEC-14	36.99	Puzzle	Croteam
1778820	TEKKEN 8	25-JAN-24	93.49	Fighting	Bandai Namco Studios Inc.
101945	Dragon Ball	26-JAN-18	59.99	Fighting	Arc System Works
504230	Celeste	25-JAN-18	25.99	Platformer	Maddy Makes Games
1735282520	Persona 4 Golden	09-DEC-08	19.99	rpg	Atlus

Delete

Before

GID	NAME	RELEASEDATE	PRICE	CATEGORY	DEVTEAMNAME
216878	Persona 3: Reload	02-FEB-24	69.99	RPG	Atlus
1382330	Persona 5 Strikers	22-FEB-21	79.99	RPG	Atlus
257510	The Talos Principle	04-DEC-14	36.99	Puzzle	Croteam
1778820	TEKKEN 8	25-JAN-24	93.49	Fighting	Bandai Namco Studios Inc.
101945	Dragon Ball	26-JAN-18	59.99	Fighting	Arc System Works
504230	Celeste	25-JAN-18	25.99	Platformer	Maddy Makes Games
1735282520	Persona 4 Golden	09-DEC-08	19.99	rpg	Atlus

During

Delete Video Game

Video Game Title: Celeste

DELETE

After

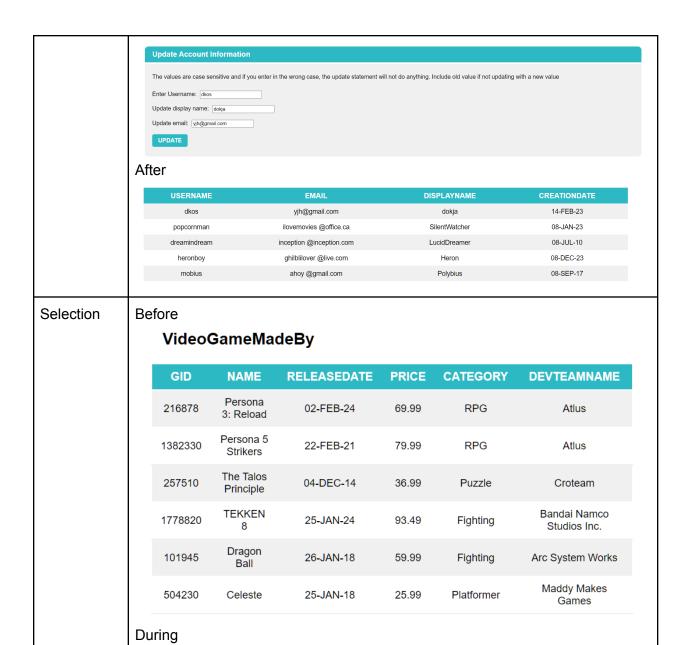
GID	NAME	RELEASEDATE	PRICE	CATEGORY	DEVTEAMNAME
216878	Persona 3: Reload	02-FEB-24	69.99	RPG	Atlus
1382330	Persona 5 Strikers	22-FEB-21	79.99	RPG	Atlus
257510	The Talos Principle	04-DEC-14	36.99	Puzzle	Croteam
1778820	TEKKEN 8	25-JAN-24	93.49	Fighting	Bandai Namco Studios Inc.
101945	Dragon Ball	26-JAN-18	59.99	Fighting	Arc System Works
1735282520	Persona 4 Golden	09-DEC-08	19.99	rpg	Atlus

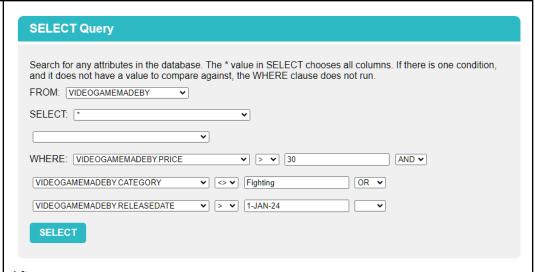
Update

Before

USERNAME	EMAIL	DISPLAYNAME	CREATIONDATE
dkos	dkos1884 @email.com	Salvation	14-FEB-23
popcornman	ilovemovies @office.ca	SilentWatcher	08-JAN-23
dreamindream	inception @inception.com	LucidDreamer	08-JUL-10
heronboy	ghilblilover @live.com	Heron	08-DEC-23
mobius	ahoy @gmail.com	Polybius	08-SEP-17

During





After

GID	NAME	RELEASEDATE	PRICE	CATEGORY	DEVTEAMNAME
216878	Persona 3: Reload	02-FEB-24	69.99	RPG	Atlus
1382330	Persona 5 Strikers	22-FEB-21	79.99	RPG	Atlus
257510	The Talos Principle	04-DEC-14	36.99	Puzzle	Croteam
1778820	TEKKEN 8	25-JAN-24	93.49	Fighting	Bandai Namco Studios Inc.

Projection

Before

VideoGameMadeBy

GID	NAME	RELEASEDATE	PRICE	CATEGORY	DEVTEAMNAME
216878	Persona 3: Reload	02-FEB-24	69.99	RPG	Atlus
1382330	Persona 5 Strikers	22-FEB-21	79.99	RPG	Atlus
257510	The Talos Principle	04-DEC-14	36.99	Puzzle	Croteam
1778820	TEKKEN 8	25-JAN-24	93.49	Fighting	Bandai Namco Studios Inc.
101945	Dragon Ball	26-JAN-18	59.99	Fighting	Arc System Works
504230	Celeste	25-JAN-18	25.99	Platformer	Maddy Makes Games

During **PROJECT Query** Search for any attributes in the database. The * value in SELECT chooses all columns. FROM: VIDEOGAMEMADEBY SELECT: VIDEOGAMEMADEBY.NAME ~ VIDEOGAMEMADEBY.PRICE ~ **PROJECT** After NAME **PRICE** Persona 3: Reload 69.99 Persona 5 Strikers 79.99 The Talos Principle 36.99 **TEKKEN 8** 93.49 Dragon Ball 59.99 Celeste 25.99 Before Join VideoGameMadeBy GID NAME **RELEASEDATE PRICE CATEGORY DEVTEAMNAME** Persona 216878 RPG 02-FEB-24 69.99 Atlus 3: Reload Persona 5 1382330 22-FEB-21 79.99 **RPG** Atlus Strikers The Talos 257510 04-DEC-14 36.99 Puzzle Croteam Principle TEKKEN Bandai Namco 1778820 25-JAN-24 93.49 **Fighting** Studios Inc. Dragon Ball 101945 26-JAN-18 59.99 Fighting Arc System Works

504230

Celeste

25-JAN-18

25.99

Platformer

Maddy Makes

Games

PlayedOn GID **PLATFORMNAME** 101945 Steam 216878 Steam 257510 Steam 504230 Nintendo Switch 1382330 Nintendo Switch 1778820 Steam During **JOIN Query** Search for any attributes in the database. Can join two tables together and filter. The * value in SELECT chooses all columns. If there is one condition, and it does not have a value to compare against, the WHERE clause does not FROM: VIDEOGAMEMADEBY, PLAYEDON ~ SELECT: * ~ WHERE: PLAYEDON.PLATFORMNAME ▼ = ▼ Steam ~ JOIN After **PLATFORMNAME** NAME **RELEASEDATE PRICE CATEGORY DEVTEAMNAME GID** Persona 3: 02-FEB-24 RPG Steam 216878 69.99 Atlus Reload The Talos 257510 04-DEC-14 36.99 Puzzle Croteam Steam Principle Bandai Namco Studios Inc. 1778820 TEKKEN 8 25-JAN-24 93.49 Fighting Steam Dragon Ball 101945 26-JAN-18 59.99 Arc System Works Steam Fighting

Before

Numerator:

Division

Adds

USERNAME	GID	STATUS
dkos	216878	playing
popcornman	1382330	complete
dreamindream	257510	backlog
dreamindream	216878	backlog
heronboy	216878	complete
heronboy	1778820	playing
heronboy	101945	playing
mobius	101945	playing
mobius	216878	complete
mobius	257510	backlog
mobius	504230	backlog
mobius	1382330	backlog
mobius	1778820	backlog

Denomnator:

${\bf VideoGame Made By}$

GID	NAME	RELEASEDATE	PRICE	CATEGORY	DEVTEAMNAME
216878	Persona 3: Reload	02-FEB-24	69.99	RPG	Atlus
1382330	Persona 5 Strikers	22-FEB-21	79.99	RPG	Atlus
257510	The Talos Principle	04-DEC-14	36.99	Puzzle	Croteam
1778820	TEKKEN 8	25-JAN-24	93.49	Fighting	Bandai Namco Studios Inc.
101945	Dragon Ball	26-JAN-18	59.99	Fighting	Arc System Works
504230	Celeste	25-JAN-18	25.99	Platformer	Maddy Makes Games

During

Divide Query

Finds all accounts that owns all games.

DIVIDE

After

USERNAME

mobius

Aggregation with Group By

(For the first example only) Before:

VideoGameMadeBy

GID	NAME	RELEASEDATE	PRICE	CATEGORY	DEVTEAMNAME
216878	Persona 3: Reload	02-FEB-24	69.99	RPG	Atlus
1382330	Persona 5 Strikers	22-FEB-21	79.99	RPG	Atlus
257510	The Talos Principle	04-DEC-14	36.99	Puzzle	Croteam
1778820	TEKKEN 8	25-JAN-24	93.49	Fighting	Bandai Namco Studios Inc.
101945	Dragon Ball	26-JAN-18	59.99	Fighting	Arc System Works
504230	Celeste	25-JAN-18	25.99	Platformer	Maddy Makes Games

MakesReviewReviewing1

REVIEWID	REVIEWDATE	RATING	LENGTH	USERNAME	GID
2341	18-FEB-23	2	300	dkos	216878
8766	28-NOV-21	2	400	dreamindream	216878
8767	02-SEP-24	5	50	heronboy	216878
1234	05-SEP-23	4	200	popcornman	1382330
5756	27-MAY-19	5	50	dreamindream	257510
5757	10-AUG-18	2	50	mobius	257510
1304	13-AUG-20	4	1000	heronboy	1778820
1305	12-SEP-19	5	1000	mobius	1778820
8765	14-OCT-21	5	400	mobius	101945
8764	20-JUL-22	3	200	heronboy	101945

During:

View and Leave Game Ratings

Game Name: Persona 3. Reload

GAME

After:

Ratings for Persona 3: Reload:

RATING	REVIEWCOUNT
2	2
5	1

Aggregation with Having

Before:

VideoGameMadeBy

GID	NAME	RELEASEDATE	PRICE	CATEGORY	DEVTEAMNAME
216878	Persona 3: Reload	02-FEB-24	69.99	RPG	Atlus
1382330	Persona 5 Strikers	22-FEB-21	79.99	RPG	Atlus
257510	The Talos Principle	04-DEC-14	36.99	Puzzle	Croteam
1778820	TEKKEN 8	25-JAN-24	93.49	Fighting	Bandai Namco Studios Inc.
101945	Dragon Ball	26-JAN-18	59.99	Fighting	Arc System Works
504230	Celeste	25-JAN-18	25.99	Platformer	Maddy Makes Games

MakesReviewReviewing1

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5757	10-AUG-18	2	50	mobius	257510
1304	13-AUG-20	4	1000	heronboy	1778820
1305	12-SEP-19	5	1000	mobius	1778820
8765	14-OCT-21	5	400	mobius	101945
8764	20-JUL-22	3	200	heronboy	101945

During:

Filter Games by Review Count

Mininum # of Reviews (leave blank to view all): 1

FILTER

After:

Games by Review Count:

NAME	DEVTEAMNAME	NUMBER_OF_REVIEWS	AVG_RATING
Persona 3: Reload	Atlus	3	3
The Talos Principle	Croteam	2	3.5
Dragon Ball	Arc System Works	2	4
TEKKEN 8	Bandai Namco Studios Inc.	2	4.5
Persona 5 Strikers	Atlus	1	4

Nested Aggregation with Group By

Before:

DevTeam

DEVTEAMNAME	EMPLOYEES	LOCATION
Atlus	338	Tokyo, Japan
Croteam	42	Zagreb, Croatia
Bandai Namco Studios Inc.	1219	Tokyo, Japan
Arc System Works	180	Yokohama, Japan
Maddy Makes Games	10	null

MakesReviewReviewing1

REVIEWID	REVIEWDATE	RATING	LENGTH	USERNAME	GID
2341	18-FEB-23	2	300	dkos	216878
8766	28-NOV-21	2	400	dreamindream	216878
8767	02-SEP-24	5	50	heronboy	216878
1234	05-SEP-23	4	200	popcornman	1382330
5756	27-MAY-19	5	50	dreamindream	257510
5757	10-AUG-18	2	50	mobius	257510
1304	13-AUG-20	4	1000	heronboy	1778820
1305	12-SEP-19	5	1000	mobius	1778820
8765	14-OCT-21	5	400	mobius	101945
8764	20-JUL-22	3	200	heronboy	101945

During:

View Top Dev Teams

View the Dev Teams that have an above average rating.

FILTER

After:

	AVERAGE_GAME_RATING	TOTAL_GAMES
Bandai Namco Studios Inc.	4.5	2
Arc System Works	4	2