# Research

After receiving feedback and conducting further study, I assume that game peripherals and domestic console game production in China have a bright future. On the one hand, domestic production teams continue to provide players with more and more outstanding games. After a lengthy period of international games dominating the market, an increasing number of game fans are spontaneously supporting the growth of domestic games, such as through spontaneous reviews and spontaneous live streaming. On the other hand, the gaming industry's revenue structure is known to include a significant portion of revenue from game peripherals. Because they adore a game, fans will want to purchase or learn more about its ancillary products.

As a result, I'm hoping that this website will connect online website and offline peripherals to form a more complete industry chain.

# Problem Statement

How might we make a fan of console video games (who) address the problem of finding interesting video games and providing reliable information for them to use as a reference when purchasing a game (what) to achieve the goal of enjoy games and get interesting peripheral products (why).

# A Console Game Fan's Journey Map

Before playing the game

**1. Game information**

- Sort &Type
- Story background
- Screenshots
- Rate

**2. Game reviews**

- Reviews from media
- Reviews from players

**3. Production Team**

- Brief introduction
- Website of the team

Downloading and playing

**1. Game information**

- Distribution platform
- Purchasing website
- Price

After playing the game

**1. Comments**

- Comments for Pros and Cons of games

**2. Other information**

- Offline events (eg. ChinaJoy)
- Peripheral products (eg. DLC)

**Online To Offline**

# Functional and Information requirements

**Information for searching:**

- Games: About 30~50 popular console games produced by domestic companies and background for the production teams.
- Specific information about each game: type, characters, story background, screen shots and rates
- Reviews of games: Links of articles from some famous games' media and articles from players.
- Visualization: making a rating chart/table showing the title of games, comparing the rate.

**Information for purchasing:**

- Price, distribution platforms and links.

**Information for peripheral products and offline activities:**

- Peripheral products: DLC, and decorations
- Offline activities: ChinaJoy

# Data research

| Information | Description | Source | Pros | Cons |
|---|---|---|---|---|
| Game information | Type, price, story background, rate | Wegame, Steam Douban | Detailed | Difficult for scraping |
| Game reviews | Articles from media and players | Weibo, Bilibili Douban | Detailed | Fragmented |
| Information for purchasing | Price, distribution platforms and links. | Wegame, Steam | - | Fragmented |
| Other information | Peripheral products and offline activities | Google | - | Fragmented |

# Scrap data

According to the table above. I obtained the information for games' titles and rates. As we can see, some data are missing.

Example: scraping data from Douban

| | title | url | rate |
|---|---|---|---|
| 0 | 仙剑奇侠传 仙劍奇俠傳 | https://www.douban.com/subject/10734111/ | 9.6 |
| 1 | 新仙剑奇侠传 新仙劍奇俠傳 | https://www.douban.com/subject/10833987/ | 9.1 |
| 2 | 仙剑客栈 | https://www.douban.com/subject/10740718/ | 8.3 |
| 3 | 仙剑奇侠传二 仙劍奇俠傳二 | https://www.douban.com/subject/10734133/ | 7.2 |
| 4 | 仙剑奇侠传三 仙劍奇俠傳三 | https://www.douban.com/subject/10734314/ | 8.9 |
| ... | ... | ... | ... |
| 116 | 港诡实录 港詭實錄 | https://www.douban.com/subject/30293812/ | 7.3 |
| 117 | 烟火 Firework | https://www.douban.com/subject/35098364/ | 8.7 |

| | title | url | rate |
|---|---|---|---|
| 0 | 仙剑奇侠传 仙劍奇俠傳 | https://www.douban.com/subject/10734111/ | 9.6 |
| 57 | 侠客风云传：天王归来 | https://www.douban.com/subject/26932718/ | 9.4 |
| 53 | 金庸群侠传 | https://www.douban.com/subject/10752886/ | 9.4 |
| 84 | 大富翁4：超时空之旅 | https://www.douban.com/subject/26575188/ | 9.4 |
| 26 | 天地劫序传 幽城幻剑录 | https://www.douban.com/subject/10736757/ | 9.4 |
| ... | ... | ... | ... |
| 101 | 少林足球 ShaoLinSoccer | https://www.douban.com/subject/26369537/ | 0.0 |
| 75 | 僵尸宅急便 灵幻宅急便 | https://www.douban.com/subject/34968728/ | |
| 80 | 洛克人大战 Rockman Strategy | https://www.douban.com/subject/30391452/ | |
| 86 | 大富翁5：忍太郎之夺宝奇谋 | https://www.douban.com/subject/34904925/ | |
| 98 | 虚拟人生4：快乐星猫 | https://www.douban.com/subject/27182085/ | |

(Sorted by rate)

# Shortcomings of data & Data cleaning and data preparation

- 1. Some of the information scraped may be empty. For example, as can be seen form the figure 1, the data of rate is empty in some grids.
- 2. The data type of price, and rating should be converted into the float type for subsequent sorting.

| | title | url | rate |
|---|---|---|---|
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| 86 | 大富翁5：忍太郎之夺宝奇谋 | https://www.douban.com/subject/34904925/ | |
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*Figure. 1*

# Strategy for completing information requirements

Here are the two scenarios I have in mind so far:

- For a game information table, it is necessary (Not Null) to include the game type, game rating, game description, etc. However, for a specific game, some information may be incomplete. For example, in the case of a missing game genre/type.
- **Solution**: Search for the game on Google and fill in the table manually with the information obtained.

- Visualization of game list.
- **Solution**: Capture the data of ratings and genres, which then will be integrated into the game information table (if necessary). And transform the obtained DataFrame into visualized charts where the games are sorted by rating or genre.