



# TECHKEY

“ Video games are bad for you? That's what they said about rock-n-roll. ”

- Shigeru Miyamoto

Dear Reader,

In the second edition of our school’s tech magazine, we aim to bring to you the best and the worst that the world of gaming offers mankind. When we looked back at the history of gaming, we realized that our interests have evolved from Pac Man to Nintendo to Play Stations to X Boxes and now virtual simulations which have taken the world by a storm.

In the current scenario, adolescents spend more time on PubG and Fortnite than they do on any other form of social media. Even Instagram and Snapchat have taken a backseat in the face of these games. Thus, it is easy to depict the obsession of these young adults with four buttons of the console.

With the lines between the real and virtual world becoming bleaker, we thought the most resonating concept that we could bring to our readers would be ‘GAMING IN THE MODERN WORLD’. We have tried to incorporate the most unusual aspects linked to gaming, from health to Olympics. Due to the increasing relevance of gaming in our society we have tried to explore the world of gaming and discover that these games go much beyond entertainment.

With this publication we hope to change your perspective regarding the virtual world. With a blend of debate, facts, quizzes and opinions we also hope to encourage our readers to think, and most importantly, think outside the box.

Happy Reading!

Shemaine Vij and Rhea Uppal  
Editors-in-chief

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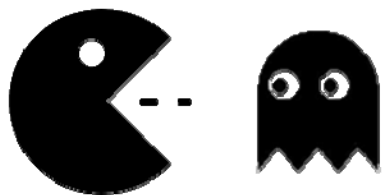


## FACT FINDER

The game Sonic Hedgehog has inspired a gene in the human body called **SHH** (Sonic Hedgehog). It is responsible for ensuring all our limbs and organs grow where they are supposed to.



The creators of Pac-Man did not know how the game ended as it was designed to run indefinitely. It was only when Billy Mitchell, the creator, finished coding the game, that they figured out how it ended.



Grand Theft Auto was originally a racing game called Race'n'Chase. However, a glitch made the police cars go crazy, ramming the player. This glitch was so popular with testers that they rebuilt the game around it, creating GTA.



As of July 2018, there are around 2.2 billion gamers in the world, out of the estimated 7.6 billion people living on earth. That means almost a third of people on this planet are gamers.



## RIP (RESUME IN PEACE)

Just to clear a fact, a social environment for competitive gaming is totally fine. But sometimes Chinese gamers get a bit too involved with their digital lives in a perpetual universe, and at that point the Internet-café (I-café) become home to a sadder story.



Chinese gamers have taken their passion for leveling-up and being the best in their games to unthinkable lengths to stay in I-cafes. THE LEMON INTERNET Bar (one of the most famous cafés) is a tiny place brimming with 80 or so computers in tidy rows. Lemon Internet Bar is one of the country's 145,000 registered internet cafes. Visitors pay a small hourly fee of about 50 cents, plus the cost of soft drinks, to use the PCs. On any given day, dozens of young men and women fill the arm-chairs, illuminated by glowing screens as they wage war in games like Legendary Alliance and DOTA and the extremely

popular World of Warcraft. They spend hours and hours there, sustaining themselves on junk food and catnaps as they lose all track of time.

Some chat and check emails, but most people while away their hours, playing games. The severe internet addiction has forced parents to send their children to camps that are no less than the concentration camps, one of the well-known of these being The Qihang camp. These centers have caused an uproar for alleged violence and for locking up patients, who are often removed from school against their will and sometimes are drugged in the facilities. Concerned by a number of high-profile Internet-related deaths and juvenile crime, the government is now taking steps to stem Internet addictions by banning new Internet cafés and imposing restrictions on violent computer games.

One must note that I-cafes in China have stood the test of time so far. They have survived, adapted, and are now thriving in their transition from a provision to check mails to professional gaming arenas.

–Jahnvi Dalmia (Grade 11)

## CAREER: VIDEO GAME TESTER

If you're just planning to sit at home, playing video games and earning money at the same time, being a video game tester is the perfect job for you. Video game testers are people who work for gaming companies and play the game in as many ways as they can perceive, identifying the flaws in the programming. A tester is required to play each level, use every character and recognize any 'bugs' or 'glitches'. A bug occurs when a player gets caught in a certain spot or when a graphic doesn't function properly. There are a lot of benefits of becoming a video game tester such as:

- ⇒ You can work from home, free from your boss hovering above your head all the time.
- ⇒ You get to play and test a game even before it is released in the market. You also get to play video games the entire day, almost 8000 times in all.
- ⇒ A tester earns about \$65,000 annually and may also use video game testing as an entry into the industry. Presently in India, a video game tester earns around Rs.4,75,000 annually. All major gaming companies, such as Nintendo, Microsoft, Apple, Electronic Arts and Sony require a video game tester, who helps them all in increasing the efficiency of their game.



# TOP GAMING HARDWARE



## Steel Series Rival 700(best mouse)

- Personalize the display of the mouse with your gamer name, favorite team logo or GIF animation.
- Mechanical switches: High performance 60 million click switches i.e. it has a lifespan of 21 years
- Comfortable top finish to lock in your grip
- An Ergonomic design which can fit the user's grip and helps them gaming for a longer while.

## Bose Headphones 700(best headphones)

- First audio augmented reality platform
- Battery life up to 20 hours
- Unrivalled microphone system
- Controllable noise cancelling
- Intuitive touch controls



## Microsoft Xbox Elite Wireless Controller (best Controller)



- Designed in collaboration with pro-level players
- Adapts to the gamer's unique style of play.
- Bluetooth
- Faster speed and accuracy
- Includes interchangeable parts and programmability features.

## Roccat Vulcan Aimo (Best keyboard )

- It uses Titan switches that help to see the LED light beneath and provide the user accurate speed and direction.
- Sturdy keys that do not wobble even when pressed aggressively.
- A special aluminum plate that protects the keyboard against wear and tear.
- Each switch features a long life LED of various colors.



*Compiled through research from sites namely [www.techradar.com](http://www.techradar.com) and [www.t3.com](http://www.t3.com)*

# FACEBOOK TENCENT

With the rising popularity of video games- PUBG, Fortnite and League of Legends have become technological masterpieces, but very few people know which tech giant is behind this generation's favourite pastime. Based in the Nanshan district in Shenzhen, China stands the twin towered office of Tencent, the superpower behind the video game boom.



**Tencent recently overtook its US counterpart Facebook, to become the world's most valuable social media company with a market capitalization of US\$540 billion.** Surprisingly, looking at its revenue makeup in 2016, it has been found that 18% of its revenue came from online advertising while Facebook's revenue consisted of a towering 98%. Yet Tencent made most of its advertising potential. Now the question arises, how?

The answer to this is Tencent's monetization strategy was based on the philosophy of user experience. The company started small, co-founded by Ma Huateng and four of his friends in 1998. It launched its first product in 1999, a free PC based instant messaging service called OICQ which was later renamed QQ. This did not do very well till 2001, when it was introduced as a messaging app on mobile phones which acted as a catalyst in helping QQ earn their first profit. Tencent slowly began introducing more and more innovative services and began earning its place among China's top tech companies. In 2011 when We Chat came into being, rapidly turning into an essential part of the Chinese population, Tencent added official accounts, payment services, a gaming centre and even an office group chat to it.

Since 2010, Tencent has been focusing on value added services, thus, gaming has been the core of its revenue system. It has been predicted that by 2020, mobile gaming will surpass all other traditional platforms for gaming and reach its pinnacle. Tencent has braced itself and has been working meticulously towards widening its playground by distributing its online gaming services worldwide and positioning itself at the top. Clearly, it has been successful so far as, its game revenues have surpassed the US\$10 billion mark in 2016, and it has been declared the world's largest online gaming company.

So, we can see that it focuses on working on understanding its users for better advertising, making it more effective and raising the probability for users to click on the ads. It does not believe in aggressive advertising, thus helping it win over its US rival, Facebook. Tencent continues to believe in targeted advertising and behavior data to pave its way in remaining at the peak by being one of the best social media and online gaming companies in the world. Tencent lives by what it believes and as Ma Huateng, its CEO says "You need to have extraordinary wisdom to be the forerunner."

- Rushali Mukherjee (Grade 11)



# HUA

*Huawei* is a leading Chinese multinational technology company, that provides information and comm Ren Zhengfei. It has the **2nd highest selling rate for smartphones in the world**; this is higher than

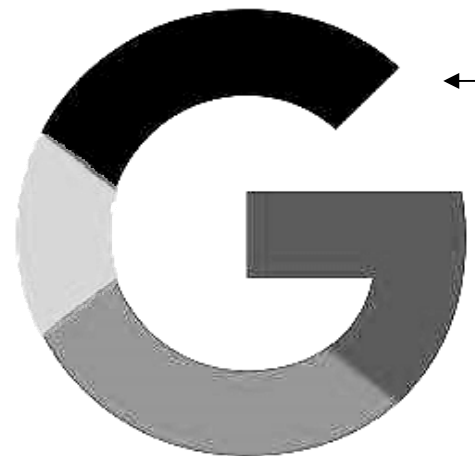


## Causes of Huawei ban:

- Ongoing Trade war between USA and China.
- Espionage: President Donald Trump thinks that the entry of Huawei gadgets in the US will be a way for the Chinese government to spy and keep a check on the US.
- Competition: Huawei is a strong competition for Apple, a US based company.
- Iran: USA charged Huawei of conspiring to violate the sanctions it had imposed on Iran .It also shows in Huawei's senior officer being appointed as the Iran's Skycom manager.
- USA wants to be the first to develop 5G network.

Google stops trade with Huawei and pulls their license to use Android following the ban. There are other companies like Microsoft, Qualcomm and Intel which are complying with the ban too.

- Huawei will not be able to license the Android, which means it will only have hardware and no software.
- All Google based amenities like Google Play, Gmail, Youtube will not be available to Huawei.
- A lot of viruses and security threats.
- No software updates for the company.



## Alternatives for Huawei:

- Huawei has been working on a backup OS, called 'HarmonyOS'.
- They are making their own app store called 'AppGallery'.
- They have made a stockpile of the parts they would like to use after the ban.

**USA has given Huawei 90 days from August 19, 2019 before the ban is in full swing, which gives the company time to switch its equipment and systems .**



# HUAWEI

communications technology (ICT) infrastructure and smart devices. The company was founded in 1987 by Ren Zhengfei, a former engineer at Apple Co.



DONALD TRUMP

*"I've signed an executive order into effect that adds Huawei to effectively be one of the blacklisted companies that are restricted from doing any business with US companies."*

*"I would like to invite members of the US media to visit our campuses. I hope you can take what you see . We would like them to know that our doors are always open. Don't believe what you hear. Come and see us. We look forward to meeting you."*



CATHERINE CHEN  
VICE PRESIDENT HUAWEI

## EVEN AFTER THIS BAN IT IS NOT THE DEATH OF HUAWEI



- The ban does not affect existing Huawei smartphone users. The users will still get the latest updates from android.
- Huawei is still releasing Huawei Mate 30 Pro in November this year . This phone uses android's open source system but does not include google services like play store. Google maps etc, instead it uses the 'AppGallery'.
- **At the G20 Summit in Osaka, Trump said the US government is planning to remove the ban on doing trade with Huawei after many US companies expressed their interest in doing trade with the Chinese company.**

## AUTONOMOUS GAMING

Companies like Google, Facebook, Microsoft and IBM are investing millions of dollars in creating superhuman AI players for digital games. Recently Elon Musk's OpenAI Project has made an AI breakthrough by winning the world championship for an online multiplayer game Dota 2. Twenty thousand fans from around the world will watch professionals compete for a twenty four million dollar price pool in the Dota 2 world championship. Dota 2 is a very complicated game with a large competitive scene consisting of millionaires from around the globe. These people practice for around ten hours every day with lucrative sponsorships, strict health and fitness regimes, many of the things one would associate with professional players in football or tennis. In order to level up its skill, the bot competes against a copy of its own self and learns to tackle the extremely complicated rules of the game. This helps them to reach the level of the best professional players in the world.

The reason all this is of interest to blue-chip companies is that e-sports games provide an easy performance measure that generates substantial public interest. Big firms have been investing vast sums in winning games for more than 20 years, since the triumph of IBM's Deep Blue against the world chess champion, Garry Kasparov.

Developments like these lead to theorize about AI programs that could learn functions for certain economic, environmental and health situations. These functions would generate effective strategies for dealing with these situations, capable of suggesting good decisions in government or business.

One of the limitations of this kind of decision-making in AI is that it can't tell us why it makes a particular move. While AI may be able to help us make better decisions for some of the toughest strategic problems we face, we will still need humans in the decision loop to consider wider ethical and social considerations. Which will make getting humans and AI to work together more important than ever.

-Agreema Chaudhary (Grade 10)

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## GAME REVIEW: FIFA 20

*FIFA 20* is a football based video game in the form of a simulation, created by Electronic Arts (EA) as part of the *FIFA series*. The real Madrid winger and Belgium national team captain Eden Hazard with Liverpool defender Virgil Van Dijk is the new cover star of the regular edition.

The FIFA 20 features VOLTA football inspired by the small sided form of football played in the streets and futsal courts across the world. It is the best way to learn the intricacies of FIFA because many new gameplay skills have been introduced in the edition. Many of these skills are being tested by the players for the first time, reducing the speed of the game. EA sports have recently announced a host of new features for the career mode including more options for customization of players. The game has also become more realistic, by improving the physics behind the ball. This in turn helps it fly at more realistic height and angle. It also focuses on the team morale which depends on performances and the answers given in the post-match interviews by the players. The major drawback of the game is the constant cut scenes that break the flow of the game.

It is undeniable that the game has tried to find a balance between realism and fun and even with some criticisms, it is still one of the best releases in the FIFA series.

-Tanisha Garg (Grade 11)





## FORTNITE SCAMS

“When you put your address in a random form, when they know your age, etc., you don't know where that will lead. It could have just been five minutes wasted on filling out a form, but it could be leading to worse,” says Herzberg.

Fortnite, one of the most popular games, along with professional gamers and celebrities also invites various hackers and scammers. Within two years of its release it has become a part of numerous scams. Major scams related to the game are those involving the game's currency called 'V-bucks'.

The game's virtual currency is used to buy various skins and weapons for the avatars that make them stronger. The scammer starts by winning you over as a friend and promising to lend you some skins he is not using. In order to do this, he asks for your credentials to transfer the accessories. Once he is in your account, he has access to all the bank details that can be altered and your access can be blocked.

Before the app was available on android game stores, there were several other fake versions that were shown as official Fortnite apps. When users downloaded these, they introduced various malwares and viruses in their devices. There are a lot of advertisements on YouTube for the game which attract the players with their schemes on in-built features. To get all this, the users are required to answer personal questions and give their credit card numbers which can be hazardous.

Once you become a victim of these scams, it is hard to get out of them. Therefore, it is necessary to be alert while giving out private information and stop clicking on random pop-ups. With the rising popularity of the game and the strong addiction towards it, we must not be blind towards its threats.

-Devna Aggarwal (Grade 9)

## SHOULD E-GAMES BE A PART OF OLYMPICS?

For the longest time, sports have been defined as an activity involving physical exertion and skill in which an individual or team competes against one another for entertainment. Contradicting the basic fundamentals of sports, E-games is defined as a generic term for recreation using a stand-alone video game, desktop or the Internet with other players. The definition itself makes it invalid for it to be included in the world famous Olympic Games.

Although e-games promote immense mental exertion, they lack in encouraging better forms of fitness. The famous poet Roald Dahl had once spoken these lines in his widely acclaimed poem "Television"-

“We've watched them gaping at the screen.  
They loll and slop and lounge about,  
And stare until their eyes pop out.”

This not only relates to a television screen but is applicable to the youth in this ever evolving 'modernized world'. While preparing for the Olympics, the participants follow a nutritious diet with rigorous workout while gamers' 'workout' consists of sitting on the couch for hours.

The violent nature of these games also goes against the very notion of Olympics. Violent gaming like this is an increasing threat to society as it encourages rebellious nature and social disconnect in children. Many current Olympians are against the inclusion of e-games in Olympics. In an interview, Sarah Walker, three-time world champion in BMX, explained her opposition.

“If I want to practice any Olympic discipline, if I wanted to try one of them, I actually have to go out and do it. I have to be active. Where gaming is right now, if I was inspired to be a gamer, my first step is to go home and sit on the couch.”

The inclusion of e-games in the Olympics would just be a propaganda spread by powerful people to mint money in the form of promotion of games and competition.

-Srishti Goyal and Anushka Mehrotra (Grade 11)



## EVER HEARD OF A DYSLEXIC GAMER?

Dyslexia is a neurological disorder affecting the person's ability to read and learn. It is often mistaken as a defect in a child's intelligence but it is actually a gap between a child's ability and achievement. As a matter of fact, it is said to have been found in at least one out of five people. In dyslexia, people can't distinguish between bilabial sounds but have a more superior ability to articulate their thoughts in speech rather than on paper.

Researchers at the University of Padua in Italy found that 10 kids with dyslexia who played an action-filled video game for nine 80-minute sessions increased their reading speed, without making mistakes. These reading gains lasted for at least two months and outpaced gains measured in 10 children with dyslexia who played a non-action version of the same game, as well as trumping the expected improvement that naturally occurs in a year for a child with dyslexia. What could have been the cause of this?

The action video games display a high speed of transient events and moving objects, in addition to requiring a high degree of perception and response. This then helps in improving certain pathways in the brain that can help improve reading ability. Also, action video games require players to constantly redirect their attention to different targets; the video games fine-tune that spotlight so as to avoid jumbling letters on a page. Video games hone visual attention skills and reading which even exceed those obtained in children after traditional therapies for dyslexia. Dyslexic children learnt to orient and focus their attention more efficiently to extract the relevant information of a written word more rapidly. This revealed an easier way which engaged children in their childhood video games along with addressing the most common reading disability disease.

-Tvisha Koccher (Grade 9)

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## THE GAME BEHIND THE NINTENDO GAMES

Nintendo is the creator of widespread, popular games such as *Mario* and *Donkey Kong* that have been the highlight of childhood of most of us. Fusajiro Yamauchi's creation originally started of as a business that produced and marketed *hanafuda*, a type of Japanese playing cards. The company was originally founded as *Yamanouchi Nintendo*, which means "leave luck to heaven".

The first foray of Nintendo in video games was in 1972 when it launched *Magnavox Odyssey*, the first video game console available to the public. Since then its popularity despite a few downfalls, remains undiminished.

Creativity has been a driving force of the industry. This can be seen by the portrayal of acclaimed characters, new ways of playing, and games that are based on a storyline, thereby enhancing the impact on the player. The number of consoles and their various designs that Nintendo has released adds to its innovative brilliance.

Another key characteristic of its games is, simplicity. The unpretentious yet unprecedented technology of its designs allow the user to familiarize themselves with the game better which deepens their interests. Like in *Mario Kart*, *Mario* is seen at the extreme left corner of the screen at the start, thus hinting the player to move forward towards the right.

This simple technology results in an attribute that plays a vital role in its publicity-immersiveness. The interactive games make you feel like being able to feel like it's a world you're immersed in, that you've become a hero, that you've become brave! The game also allows easy control of its characters.

In the end Nintendo has enough sustenance to last 20-30 years and it is going to be on top of the ladder for a long time.

-Saanvi Hissaria and Teista Dwivedi (Grade 9)



## APPLE ARCADE

Apple arcade is Apple's premium subscription gaming service that will let users download and play included games for one monthly fee with no added costs.

Cost: INR 99 per month with a one month free trial available.

Release Date: September 19,2019

Where to find it: It can be found on the Apple Arcade tab added by Apple to the App Store.

### Features of Apple Arcade:

- One subscription will let up to six family members access games. For this feature family sharing needs to be turned on. This requires all family members to have the same credit card associated with their Apple IDs.
- No advertisements are present and no additional charges are charged between games.
- Downloaded games can be played offline
- Strictly committed to privacy.
- The games are freshly created by big indie developers and big name gaming companies exclusively for apple arcade.

## MIRACLE

### (HIGHEST PAID GAMER)

Full name : Amer Al-Barkawi

Net worth : \$892,581.60

Stage name : Miracle

Game played : Dota 2

Age : 22 years

Team : Liquid

- Miracle started his gaming with Defense of the Ancients, the game whose sequel is Dota 2 .
- Miracle started playing Dota 2 as a pubstar meaning that he did not play competitively, but was ranked highly in public matches.
- Miracle's team liquid was declared winner of The International 2017 which is the iteration of Dota 2.
- Before his 18th birthday, Miracle- was awarded \$759.45 in cash prizes from 2 tournaments.
- Miracle- is currently ranked 7 in highest overall earnings, and 1 in highest earnings for players.



# MIND OVER SPLATTER

1. Which was the first video game?

- a) Pong
- b) Pacman
- c) Mario
- d) Smash TV

2. Which country has a ban on developing, distributing and displaying video games in which the goal is to shoot people?

- a) Japan
- b) United Kingdom
- c) Saudi Arabia
- d) Venezuela

3. Which is the only country to ban Fortnite?

- a) United Kingdom
- b) North Korea
- c) Iraq
- d) Venezuela

4. Guinness world record for the largest collection of videogames ?

- a) Aleksandr Dashkevych (Ukraine)
- b) Antonio Romero Monteiro (USA)
- c) Lee Young Ho (South Korea)
- d) Saahil Arora (Indo American)

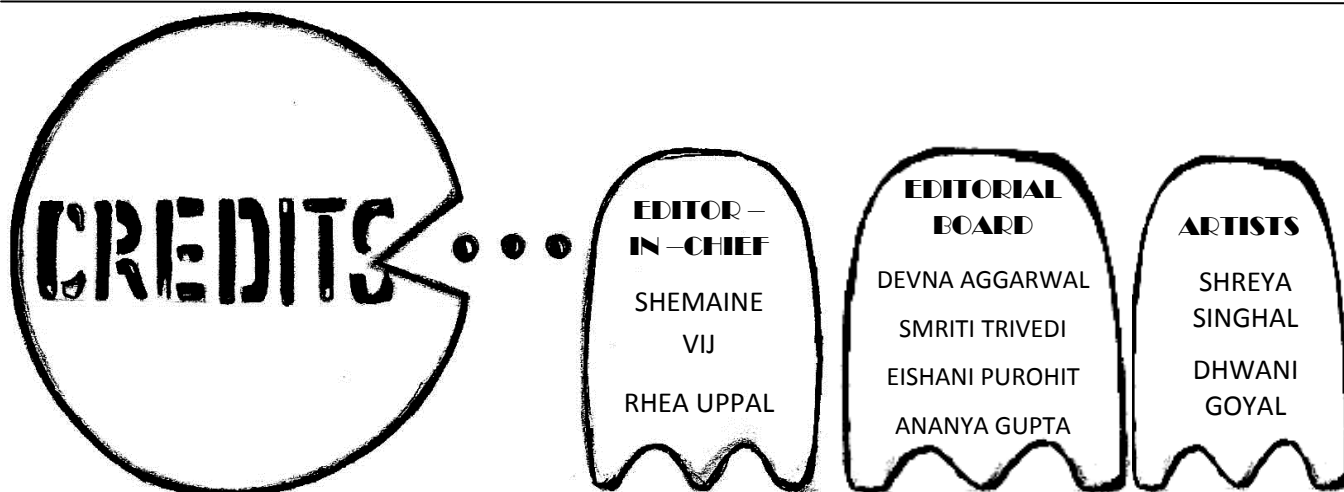
5. What is the maximum score one can get in PacMan?

- a) 77700000
- b) 123456789
- c) 3333360
- d) There is no end to the game

6. What is the highest number of times a human could press a controller button in a second ?

- a) 5
- b) 16
- c) 25
- d) 10

Answers: 1. a), 2. d), 3. c), 4. b), 5. c), 6. b)



**Special Thanks:** Rushali Mukherjee    Saanvi Hissaria  
 Ms Deepa Mehta    Agreema Chowdhry    Tiesta Dwivedi  
 Jahnvi Dalmia    Tanisha Garg    Janhvi Chandra  
 Tvisha Koccher    Anushka Mehrotra    Srishti Goyal

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