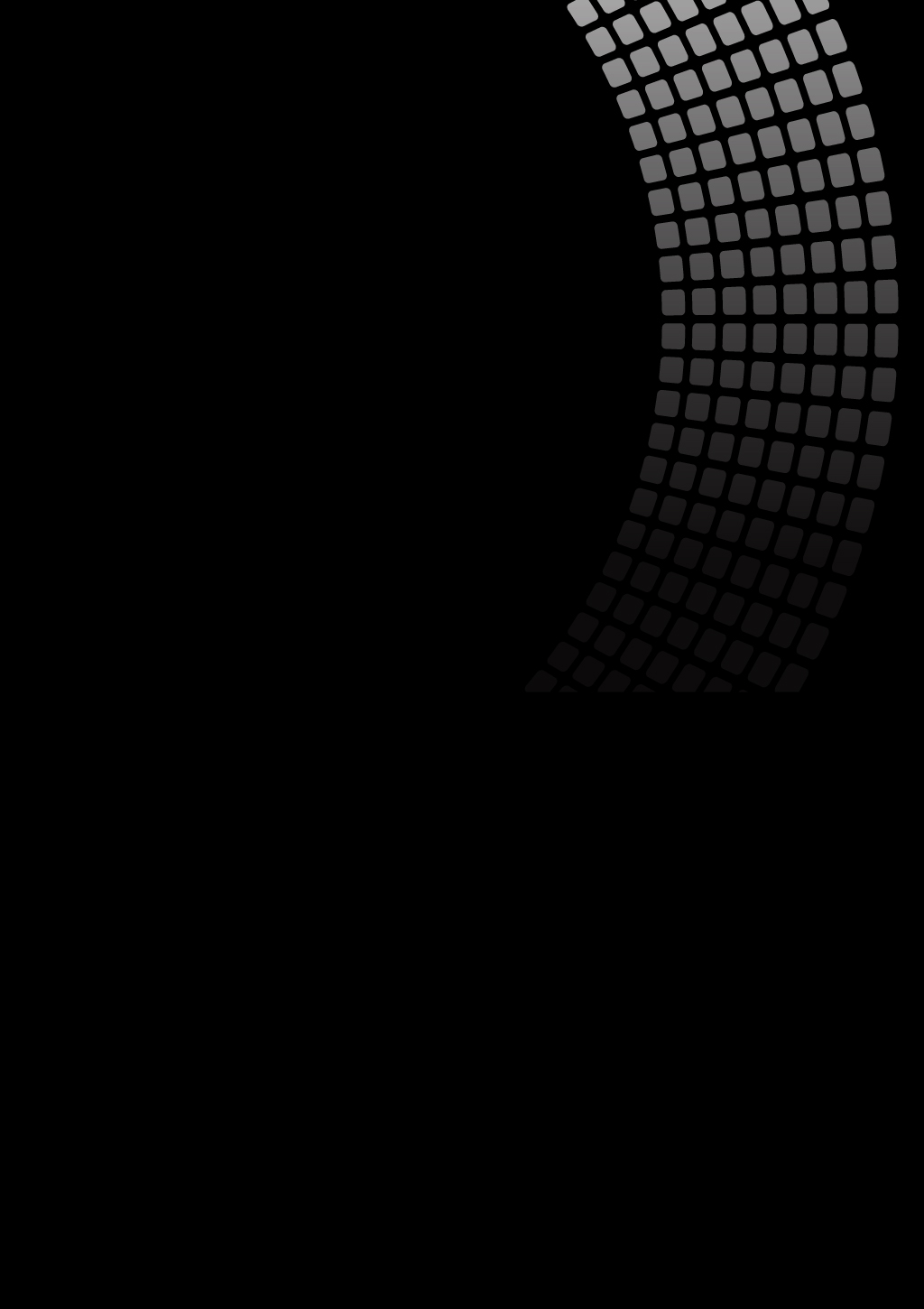
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| **ASSIGNED BY :** | **Sir Fahad Maqbool** |
| **ASSIGNED To:** | **Maria Zareef**  **Aqib Ijaz**  **Abdullah Manzoor** |
| **Subject:** | **Web Engineering** |
| **TOPIC:** | **ORSD of Video gaming Ontology** |
| **Update:** | **08May,2022** |

**ONTOLOGY REQUIREMENTS SPECIFICATION DOCUMENT (ORSD) OF VIDEO GAME**

**Purpose:**

The purpose of building the Ontology is to capture knowledge about events and information about players.

**Scope**:

The ontology focuses on modeling events happening inside video games as well as players and their playing behavior.

The motivation for creating this ontology is to enable interoperability between different games, allowing them to exchange information between each other.

**Implementation language:**

The ontology has to be implement inOWL language.

**Intended End-Users**:

User 1: Normal users (kids, young adults, older) who play games for fun.

User 2: Professional Gamers who play games for achieving high levels & explore games for money.

User 3: Developers of the Game who use games for improvements.

User 4: Businessman who use games for to make huge income.

**Intended Uses:**

Use 1. Provide Healthy brain stimulation

Use 2. Development of problem-solving skills

Use 3. Stress relief

Use 4. Gamers may have better social skills

Use 5. Improve your vision

Use 6. They encourage teamwork. ...

Use 7. They improve strategy and leadership. ...

Use 8. They teach languages. ...

Use 9. Physical fitness.

**Ontology Requirements:**

1. Non-Functional Requirements

NFR1. The ontology must support a multiple types of video game players in the following: kids, adults and older.

NFR2. The ontology based on the international, European or de-facto standards in existence or under development.

NFR3. The ontology must support on English language.

1. Functional Requirements : **Competency Questions**

Group 1: Game Metadata

Group 2: Gameplay Knowledge

Group 3: Event Knowledge

Group 4: Business Knowledge

**Group 1:- Game Metadata**

CQ01:-What is the username of the player? aqib\_01, maria\_z

CQ02:-Who are the friends of the player? “sadi\_01, abdullah26” .

CQ03:-Who are the friends that play other games as well with this player? “Cool Guy, Agent27”

CQ04:-Who are the most active players in the game? “Atif Aslam, Justin Bieber”

CQ05:-What are the achievements of my friends? “Cool Guy”, “Mr. Guru”

CQ06:-Who does the player play with? “Nobody”, “Cristiano\_Ronaldo”

CQ07:-What are the achievements your friend has received? “Guru” “Kill’Em’All”

CQ08:-What achievements does a game have? “Unlock me!”, “You Rock”

CQ09:-How many hours has this game been played in total? 50 00 hours

CQ10:-What are the types of achievements in this game? Skill­based, Veteran, Luck,

CQ11:-What are the types of achievements a game can have? Skill­based, Veteran, Luck,

CQ12:-What is the genre of the game? RPG, Adventure, Puzzle

CQ13:-What items exist in a game? “Magical Staff”, “Ferrari”

CQ14:-Who is the creator of the game? “Electronic Arts”, “Jon Doe”

CQ15:-What is the release date of the game? 06.06.2022

CQ16:-What are the games similar to this one? “Hitman 1, Hitman 2, MassEffect 2”

CQ17:-List all games of a certain Genre? “NHL12, Fifa13, NBA10”

CQ18:-What type is the item of? “Consumable”, “Equipable”

CQ19:-What abilities does an item have? Magic, Equipable, Damage­dealing

CQ20:-Which is the fastest car in the game?​  ​ Ferrari, Audi A8

CQ21:-How much damage does a weapon deal? “57”, “A lot”

**Group 2: Gameplay Knowledge**

CQ22:-.Who has the best kill count in the game? “aqib\_01”

CQ23:-.Who is the top 3 players in the game? “1. aqib\_01 ­ 2. MariaK ­ 3. AbdullahM”

CQ24:-What achievements have a player obtained? “Cool Guy”, “Orc Slayer”

CQ25:-What games has the player played? “World of Warcraft”, “Final Fantasy VII”, “Clash of  Clans”

CQ26:- What items does the player have? “Sword of Steel”, “Magic Potion”, “Mage’s Hat”

CQ27:-What achievements of a certain type does the player have? “Speedy Runner”, “Jumping  Hero”, “Rolling Master”

CQ28:- What kind of games are owned by players that have certain achievement? “NHL12,

WoW, Space Invaders”

CQ29:- What is the last game a player has played? Hitman 2

CQ30:- How big percentage of players has a certain item in the game? 23%, 87%

CQ31:-What are the most common genres played by players with a certain character class in a  game? RPG, Sports, Simulators

CQ32:-What is the preferred weapon of players with a certain character class? Shuriken, Buster  Sword, AK­47

CQ33:-What type of weapon are players using who win mostly in the game? Ak­47, Longsword,  Crossbow

CQ34:- When was the last time a certain player played this game? 20.05.2022

CQ35:- In how many games does the player have all the achievements? 2, 0, 12

?CQ36:- What is the favorite map of the player in the game? “de\_dust, cs\_italy”

CQ37:- What is the most played map in a game? “RunRun”

CQ38:-What is the difficulty level the player uses in certain game genres? “Easy” “Intermediate” “Hard”

**Group 3: Event Knowledge**

CQ39:-.How many times has I killed someone in a game? 4

CQ40:- How many goals did I score in FIFA 15? 0

CQ41:-What is the most common level in the game where players stop playing? Level 4, Level  7, Le Mans ­track

CQ42:- How big percentage of players have made a certain decision in the game? 24% 6%

CQ43:- How big percentage of players skip the cutscenes? 99%

CQ44:- How many players mute the game music? 100% 50 000

CQ45:- After gaining an item in the game, how many players use it? 100, 5, None

CQ46:- How many times players have died in a level? 40, 500 00

CQ47:- How big percentage of players use the item in question in other linked games? 2%, 55%

CQ48:-How many players have moved from game to another when they have seen a linked  commercial? 40 000, 100 million

CQ49:-What is the first action done by the player after an event? “Save game”, “Drink health  potion”, “Change equipment”

CQ50:- What is the most crafted item in the game? “Magical Hat”, “Health Potion”, “Dragon  Armor”

CQ51:-What is the location in map where the players die the most? “X:47, Y:58, Z:60”

CQ52:- What equipment does a player have in a game? “Sword of Zelda”, “Dagger of Ice”

CQ53:-What consumable items does a player have in game? “Health Potion”, “Potion of Mana”,  “Cookie”

CQ54:-.What is the most used item in the game? “Baseball bat”

CQ55:-.What is the games where a player can use this item? “Sam & Max, Space Quest”

**Group 4: Business Knowledge**

CQ56:-.How many players have made in­app purchases? 5 000, 8%

CQ57:-.How many players who have already spent money in this game, spend money again? 3%

CQ58:-.What is the likelihood that a player who has purchased in­app purchase in one game, do  so in the other one? 47%, 99%, 0.5%

CQ59:-.If a player is given free item in the game, how likely are they to make an in­app purchase? “85%”

CQ60:What type of items are the most traded ones in the game’s marketplace? “Health potions”, “Consumable Items”, “Cute Cakes”

CQ61:-.How much money an average player spends in in­app purchases?  10 USD

CQ62:-.What time is most of the in­app purchases done? “Evening”, between 19­22 GMT

CQ63:-.Where do the most paying customers live in? “Pakistan”, India, Paris

CQ64:-.How long does an average player spend in the game before making first in­app purchase?  1 hour, 87 minutes, 2 weeks

CQ65:-.Where do the players live who have not made any in­app purchases? “Brazil”, “South  Europe”

CQ66:-.Where do the players who have done the most in­app purchases live? “Pakistan”,  “India”, “South America”

CQ67:-.How many players clicked an ingame advertisement? 40.000

CQ68:-.How many players start the other game after seeing an advertisement? 24, 600

CQ69:-.List of games for WINDOW based operating system? “Game1” “Game2” “Game1”

CQ70:-.List of games for MAC based operating system? “Game1” “Game2” “Game1”

CQ71:-.List of games for ANDROID based operating system? “Game1” “Game2” “Game1”

CQ72:-.List of games for LINUX based operating system? “Game1” “Game2” “Game1”

CQ73:-.List of games for VIRTUAL REALITY based? “Game1” “Game2” “Game1”

***Pre-Glossary Terms:***

**Terms from the Competency Questions +Frequency**

**Terms from Competency Questions Frequency**

Game 67

Player 43

Achievements 9

Events 2

Platform 1

Companies 1