CPSC 304 Project Cover Page

Milestone #: 2

Date: 2023-10-20

Group Number: 3

Name	Student Number	CS Alias (Userid)	Preferred E-mail Address
Hung Dinh	19774520	e5o4a	viethung5403@gmail.com
Yu Guo	34418582	z9n9b	yuguogm@gmail.com
Christie Leung	83048389	a7q7c	christie@murphyshome.net

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 e-mail 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

Group 3 Milestone 2

▼ 1. Cover Page (attached above)

▼ 2. Summary

This project creates a database of the relationships of entities in the game Genshin Impact. Through this project, players will be able to get detailed information about the data within the game such as enemies and their locations without having to figure it out through gameplay.

▼ 3. Notes from Milestone 1 (ER Diagram attached at the end)

- we changed the total participation constraint from character to stat since some stats are for characters, some for enemies, some for consumables, etc. This means that not all stats will be linked with character and should not have a participation constraint.

▼ 4. Relational Schema

> 💡 Primary Keys are underlined and all primary keys are also candidate keys if not explicitly stated.

> 💡 Foreign Keys are bolded.

▼ Entities

☐ Material(<u>Name</u>, Description)

- **Candidate key**: {Description}

☐ Consumable(**<u>Name</u>**, Recipe)

- **Candidate key**: Same as primary key

☐ AscensionMaterial(**<u>Name</u>**, Tier, AscensionType)

- StatID is not NULL

- **Candidate key**: Same as primary key

☐ Region(<u>Name</u>, Lore)

- **Candidate key**: Same as primary key

☐ Subregion(**RName**, <u>SubName</u>, SubLore, ZoneType)

- **Candidate key**: Same as primary key

☐ Weapon(<u>Name</u>, Tier, Lore, Set Name, Dmg, Ability, WeaponType)

- Tier, SetName, WeaponType are not NULL

- **Candidate key**: {WeaponType, SetName}

☐ ArtifactSet(<u>SetName</u>, 4PieceBonus, 2PieceBonus, Tier)

- **Candidate key**: Same as primary key

☐ Artifact(**SetName**, <u>Name</u>, ArtifactType, Description)

- **Candidate key**: Same as primary key

☐ Stat(<u>ID</u>, CritRate, CritDMG, Defense, AttackDMG, HP)

- **Candidate key**: Same as primary key

☐ Enemies(<u>Name</u>, Description, Lore, **StatID**)

- StatID is not NULL

- **Candidate key**: {Description}, {Lore}

☐ Boss(**<u>Name</u>**, RequiredResin, Phases, ElementalType)

- **Candidate key**: Same as primary key

☐ Character(<u>Name</u>, ElementalType, Gender, WeaponType, Tier, Description, **StatID**, **RegionName**)

- **Candidate key**: {Description}

▼ Relationships

> 💡 All Foreign Keys that have the same name are changed to better represent where it came from. Ex. Boss has Name key and Artifact Set has Name key, so we change it to BossName and ArtifactSetName in the relationship table.

☐ BossDrops(**BossName**, **ArtifactSetName**)

- **Candidate key**: Same as primary key

☐ EnemyFoundAt(**EnemyName**, **RegionName**)

- **Candidate key**: Same as primary key

☐ EnemyDrops(**EnemyName**, **MaterialName**)

- **Candidate key**: Same as primary key

☐ CharacterCanWield(**CharacterName**, **WeaponName**, Rank)

- **Candidate key**: Same as primary key

☐ CharacterArtifacts(**CharacterName**, **ArtifactSetName**, Rank)

- **Candidate key**: Same as primary key

☐ RequiredMaterialForWeapon(**WeaponName**, **AscensionMaterial**, Quantity)

- **Candidate key**: Same as primary key

☐ MaterialsFoundAt(**SubRegionName, MaterialName**)

- **Candidate key**: Same as primary key

☐ CharacterInteractions(**Char1**, **Char2**, Battle, Contract, Friend)

- **Candidate key**: {Contract}

☐ ConsumableBoosts(**ConsumableName**, **StatID**)

- StatID is not NULL

- **Candidate key**: Same as primary key

☐ RequiredMaterialForCharacter(**CharacterName**, **AscensionMaterialName**, Quantity)

- **Candidate key**: Same as primary key

☐ ArtifactEnhances(**StatID**, **ArtifactName**)

- StatID is not NULL

- **Candidate key**: Same as primary key

▼ 5. Functional Dependencies

Character(<u>Name</u>, ElementalType, Gender, WeaponType, Tier, Description, **StatID**, **RegionName**)

- Name -> Description, Gender, Elemental type, Weapon Type, Tier, StatID, RegionName
- Description -> Name

    Candidate key: {Description}

Enemies(<u>Name</u>, Description, Lore, **StatID**)

- Name-> Description, lore, StatID
- Description -> Name
- Lore -> Name

    Candidate key: {Description}, {Lore}

Boss(**<u>Name</u>**, RequiredResin, Phases, ElementalType)

- Name -> Elemental Type, Phases, Resin required

    Candidate key: Same as primary key

Stat(<u>ID</u>, CritRate, CritDMG, Defense, AttackDMG, HP)

- ID -> Crit Rate, Crit DMG, DEF, Attack DMG, HP

    Candidate key: Same as primary key

ArtifactSet(<u>SetName</u>, 4PieceBonus, 2PieceBonus, Tier)

- SetName -> 4PieceBonus, 2PieceBonus, Tier

    Candidate key: Same as primary key

Artifact(**<u>SetName</u>**, <u>Name</u>, Type, Description)

- SetName, Name -> Type, Description

    Candidate key: Same as primary key

Material(<u>Name</u>, Description)

- Name -> Description

    Candidate key: Same as primary key

Consumable(**<u>Name</u>**, Recipe)

- Name -> Recipe

  Candidate key: Same as primary key

AscensionMaterial(**Name**, Tier, Type)

- Name -> Tier, Type

  Candidate key: Same as primary key

Region(Name, Lore)

- Name -> Lore

  Candidate key: Same as primary key

Subregion(**RName**, SubName, SubLore, ZoneType)

- SubName, RName -> SubLore, ZoneType

  Candidate key: Same as primary key

Weapon(Name, Tier, Lore, Set Name, Dmg, Ability, WeaponType)

- Name -> Tier, Lore, Set Name, Dmg, Ability, WeaponType
- WeaponType, SetName -> Name

  Candidate key: {WeaponType, SetName}

BossDrops(**BossName**, **ArtifactSetName**)

  Candidate key: Same as primary key

EnemyFoundAt(**EnemyName**, **RegionName**)

  Candidate key: Same as primary key

EnemyDrops(**EnemyName**, **MaterialName**)

  Candidate key: Same as primary key

CharacterCanWield(**CharacterName**, **WeaponName**, Rank)

- CharacterName, WeaponName -> Rank

  Candidate key: Same as primary key

CharacterArtifacts(**CharacterName**, **ArtifactSetName**, Rank)

- CharacterName, ArtifactSetName -> Rank

Candidate key: Same as primary key

RequiredMaterialForWeapon(**WeaponName**, **AscensionMaterial**, Quantity)

- WeaponName, AscensionMaterial -> Quantity

  Candidate key: Same as primary key

MaterialsFoundAt(**SubRegionName, MaterialName**)

  Candidate key: Same as primary key

ConsumableBoosts(**ConsumableName**, **StatID**)

  Candidate key: Same as primary key

RequiredMaterialForCharacter(**CharacterName**, **AscensionMaterialName**, Quantity)

- CharacterName, MaterialName -> Quantity

  Candidate key: Same as primary key

ArtifactEnhances(**StatID**, **ArtifactName**)

  Candidate key: Same as primary key

CharacterInteractions(**Char1**, **Char2**, **Region**, Battle, Contract, Friend)

- Char1, char2 -> region, battle, contract, friend

- Contract -> char1, char2

- Battle -> region

- **Closures**

  char1, char2+ = {char1, char2, friend, battle, region, contract}

  contract+ = {char1, char2, friend, battle, region, contract}

  battle+ ={battle, region}

  Candidate key: {Contract}

▼ 6. Normalization

The only table that violated 3NF is `CharacterInteractions( Char1 , Char2 , Region , Battle, Contract, Friend)` . The following is the BCNF decomposition:

- Char1, Char2 -> Region, Battle, Contract, Friend

- Contract -> Char1, Char2

- Battle -> Region

Closures:

Char1, Char2 + = {Char1, Char2 , Friend, Battle, Region, Contract}

Contract+ = {Char1, Char2, Friend, Battle, Region, Contract}

Battle+ ={Battle, Region} - **violates BCNF**

CI1(<u>C1</u>, <u>C2</u>, R, B, C, F) decompose on B -> R:

CI2(<u>B</u>, **R**), CI3(**<u>C1</u>**, **<u>C2</u>**, **B**, C, F)

Candidate key: {Contract}

Both are in BCNF so we don't need to decompose further.

Therefore the final tables are:

- Material(<u>Name</u>, Description)

- Consumable(**<u>Name</u>**, Recipe)

- AscensionMaterial(**<u>Name</u>**, Tier, Type)

- Region(<u>Name</u>, Lore)

- Subregion(**<u>RName</u>**, <u>SubName</u>, SubLore, ZoneType)

- Weapon(<u>Name</u>, Tier, Lore, Set Name, Dmg, Ability, WeaponType)

- ArtifactSet(<u>SetName</u>, 4PieceBonus, 2PieceBonus, Tier)

- Artifact(**<u>SetName</u>**, <u>Name</u>, Type, Description)

- Stat(<u>ID</u>, CritRate, CritDMG, Defense, AttackDMG, HP)

- Enemies(<u>Name</u>, Description, Lore, **StatID**)

- Boss(**<u>Name</u>**, RequiredResin, Phases, ElementalType)

- Character(<u>Name</u>, ElementalType, Gender, WeaponType, Tier, Description, **StatID**, **RegionName**)

- BossDrops(**<u>BossName</u>**, **<u>ArtifactSetName</u>**)

- EnemyFoundAt(**<u>EnemyName</u>**, **<u>RegionName</u>**)

- EnemyDrops(**EnemyName**, **MaterialName**)

- CharacterCanWield(**CharacterName**, **WeaponName**, rank)

- CharacterArtifacts(**CharacterName**, **ArtifactSetName**, rank)

- RequiredMaterialForWeapon(**WeaponName**, **AscensionMaterial**, Quantity)

- MaterialsFoundAt(**SubRegionName, MaterialName**)

- CharacterInteractions(**Char1**, **Char2**, Battle, Contract, Friend)

- BattleInRegion(**Battle**, **Region**)

- ConsumableBoosts(**ConsumableName**, **StatID**)

- RequiredMaterialForCharacter(**CharacterName**, **AscensionMaterialName**, Quantity)

- ArtifactEnhances(**StatID**, **ArtifactName**)

▼ 7. SQL DDL Statements

Material (Name, Description)

```
CREATE TABLE Material (
    Name VARCHAR(255) PRIMARY KEY,
    Description LONGTEXT
);
```

Consumable (Name, Recipe)

```
CREATE TABLE Consumable (
    Name VARCHAR (255) PRIMARY KEY,
    Recipe LONGTEXT,
    FOREIGN KEY (Name) REFERENCES Material(Name) ON DELETE CASCADE ON UPDATE CASCADE
);
```

AscensionMaterial (Name, Tier, AscensionType)

```
CREATE TABLE AscensionMaterial (
    Name VARCHAR(255) PRIMARY KEY,
    Tier INT NOT NULL,
    AscensionType VARCHAR(255),
```

```
        FOREIGN KEY (Name) REFERENCES Material(Name) ON DELETE CASCADE ON UPDATE CASCADE
);
```

Region (Name, Lore)

```
CREATE TABLE Region (
    Name VARCHAR(255) PRIMARY KEY,
    Lore LONGTEXT
);
```

Subregion (**RName**, SubName, SubLore, ZoneType)

```
CREATE TABLE Subregion (
    RName VARCHAR(255),
    SubName VARCHAR(255),
    SubLore LONGTEXT,
    ZoneType VARCHAR(255),
    PRIMARY KEY (RName, SubName),
    FOREIGN KEY (RName) REFERENCES Region(Name) ON DELETE CASCADE ON UPDATE CASCADE
);
```

Weapon (Name, Tier, Lore, Set Name, Dmg, Ability, WeaponType)

```
CREATE TABLE Weapon (
    Name VARCHAR(255) PRIMARY KEY,
    Tier VARCHAR(255) NOT NULL,
    Lore LONGTEXT,
    SetName VARCHAR(255) NOT NULL,
    Dmg INT,
    Ability VARCHAR(255),
    WeaponType VARCHAR(255) NOT NULL
);
```

ArtifactSet (SetName, 4PieceBonus, 2PieceBonus, Tier)

```
CREATE TABLE ArtifactSet (
    SetName VARCHAR(255) PRIMARY KEY,
    `4PieceBonus` LONGTEXT UNIQUE NOT NULL,
    `2PieceBonus` LONGTEXT UNIQUE NOT NULL,
```

```
    Tier INT
);
```

Artifact (**SetName**, <u>Name</u>, ArtifactType, Description)

```
CREATE TABLE Artifact (
    SetName VARCHAR(255),
    Name VARCHAR(255),
    ArtifactType VARCHAR(255),
    Description LONGTEXT,
    PRIMARY KEY (SetName, Name),
    FOREIGN KEY (SetName) REFERENCES ArtifactSet(SetName) ON DELETE CASCADE ON UPDATE
CASCADE
);
```

Stat (<u>ID</u>, CritRate, CritDMG, Defense, AttackDMG, HP)

```
CREATE TABLE Stat (
    ID INT PRIMARY KEY,
    CritRate FLOAT,
    CritDMG FLOAT,
    Defense FLOAT,
    AttackDMG FLOAT,
    HP FLOAT
);
```

Enemies (<u>Name</u>, Description, Lore, **StatID**)

```
CREATE TABLE Enemies (
    Name VARCHAR(255) PRIMARY KEY,
    Description LONGTEXT,
    Lore LONGTEXT,
    StatID INT NOT NULL,
    FOREIGN KEY (StatID) REFERENCES Stat(ID) ON UPDATE CASCADE ON DELETE CASCADE
);
```

Boss (**Name**, RequiredResin, Phases, ElementalType)

```
CREATE TABLE Boss (
    Name VARCHAR(255) PRIMARY KEY,
    RequiredResin INT,
```

```
    Phases INT,
    ElementalType VARCHAR(255),
    FOREIGN KEY (Name) REFERENCES Enemies(Name)
);
```

Character (<u>Name</u>, ElementalType, Gender, WeaponType, Tier, Description, **StatID**, **RegionName**)

```
CREATE TABLE `Character` (
    Name VARCHAR(255) PRIMARY KEY,
    ElementalType VARCHAR(255) NOT NULL,
    Gender VARCHAR(20),
    WeaponType VARCHAR(20) NOT NULL,
    Tier INT NOT NULL,
    Description LONGTEXT UNIQUE,
    StatID INT NOT NULL,
    RegionName VARCHAR(255) NOT NULL,
    FOREIGN KEY (StatID) REFERENCES Stat(ID) ON DELETE CASCADE ON UPDATE CASCADE,
    FOREIGN KEY (RegionName) REFERENCES Region(Name) ON DELETE CASCADE ON UPDATE CASCA
DE
);
```

BossDrops (**<u>BossName</u>**, **<u>ArtifactSetName</u>**)

```
CREATE TABLE BossDrops (
    BossName VARCHAR(255),
    ArtifactSetName VARCHAR(255),
    PRIMARY KEY (BossName, ArtifactSetName ),
    FOREIGN KEY BossName REFERENCES Boss(Name),
    FOREIGN KEY ArtifactSetName REFERENCES ArtifactSet(Name)
);
```

EnemyFoundAt (**<u>EnemyName</u>**, **<u>RegionName</u>**)

```
CREATE TABLE EnemyFoundAt (
    EnemyName VARCHAR(255),
    RegionName VARCHAR(255),
    PRIMARY KEY (EnemyName, RegionName),
    FOREIGN KEY EnemyName REFERENCES Enemies(Name),
    FOREIGN KEY RegionName REFERENCES Region(Name)
);
```

EnemyDrops (**EnemyName**, **MaterialName**)

```
CREATE TABLE EnemyDrops(
    EnemyName VARCHAR(255),
    MaterialName VARCHAR(255),
    PRIMARY KEY (EnemyName, MaterialName),
    FOREIGN KEY EnemyName REFERENCES Enemies(Name),
    FOREIGN KEY MaterialName REFERENCES Material(Name)
);
```

CharacterCanWield (**CharacterName**, **WeaponName**, Rank)

```
CREATE TABLE CharacterCanWield(
    CharacterName VARCHAR(255),
    WeaponName VARCHAR(255),
    Rank INT,
    PRIMARY KEY (CharacterName, WeaponName),
    FOREIGN KEY CharacterName REFERENCES `Character`(Name),
    FOREIGN KEY WeaponName REFERENCES Weapon(Name)
);
```

CharacterArtifacts (**CharacterName**, **ArtifactSetName**, Rank)

```
CREATE TABLE CharacterArtifacts(
    CharacterName VARCHAR(255),
    ArtifactSetName VARCHAR(255),
    Rank INT,
    PRIMARY KEY (CharacterName, ArtifactSetName),
    FOREIGN KEY CharacterName REFERENCES `Character`(Name),
    FOREIGN KEY ArtifactSetName REFERENCES ArtifactSet(Name)
);
```

RequiredMaterialForWeapon (**WeaponName**, **AscensionMaterial**, Quantity)

```
CREATE TABLE RequiredMaterialForWeapon(
    WeaponName VARCHAR(255),
    AscensionMaterial VARCHAR(255),
    Quantity INT,
    PRIMARY KEY (WeaponName, AscensionMaterial),
    FOREIGN KEY WeaponName REFERENCES Weapon(Name),
```

```
        FOREIGN KEY AscensionMaterial REFERENCES AscensionMaterial(Name)
);
```

MaterialsFoundAt (**SubRegionName**, **MaterialName**)

```
CREATE TABLE MaterialsFoundAt(
    SubRegionName VARCHAR(255),
    MaterialName VARCHAR(255),
    PRIMARY KEY(SubRegionName, MaterialName),
    FOREIGN KEY SubRegionName REFERENCES Subregion(RName),
    FOREIGN KEY MaterialName REFERENCES Material(Name)
);
```

CharacterInteractions (**Char1**, **Char2**, **Battle**, Contract, Friend)

```
CREATE TABLE CharacterInteractions (
    Char1 VARCHAR(255),
    Char2 VARCHAR(255),
    Battle VARCHAR(255),
    Contract VARCHAR(255),
    Friend VARCHAR(255),
    PRIMARY KEY (Char1, Char2),
    FOREIGN KEY Char1 REFERENCES `Character`(Name),
    FOREIGN KEY Char2 REFERENCES `Character`(Name),
    FOREIGN KEY Battle REFERENCES BattleInRegion(Battle)
);
```

BattleInRegion (Battle, **Region**)

```
CREATE TABLE BattleInRegion (
    Battle VARCHAR(255) PRIMARY KEY,
    Region VARCHAR(255),
    FOREIGN KEY Region REFERENCES Region(Name)
);
```

ConsumableBoosts (**ConsumableName**, **StatID**)

```
CREATE TABLE ConsumableBoosts (
    ConsumableName VARCHAR(50),
    StatID INT NOT NULL,
```

```
    PRIMARY KEY (ConsumableName, StatID)
);
```

RequiredMaterialForCharacter (**CharacterName**, **AscensionMaterialName**, Quantity)

```
CREATE TABLE RequiredMaterialForCharacter(
    CharacterName VARCHAR(255),
    AscensionMaterialName VARCHAR(255),
    Quantity INT,
    PRIMARY KEY (CharacterName, MaterialName),
    FOREIGN KEY CharacterName REFERENCES `Character`(Name),
    FOREIGN KEY AscensionMaterialName REFERENCES Material(Name)
);
```

ArtifactEnhances (**StatID**, **ArtifactName**)

```
CREATE TABLE Enhances (
    StatID INT,
    ArtifactName VARCHAR(50),
    PRIMARY KEY (StatID, ArtifactName),
    FOREIGN KEY StatID REFERENCES Stat(ID),
    FOREIGN KEY ArtifactName REFERENCES Artifact(Name)
);
```

▼ 8. INSERT Statements

Material(Name, Description)

```
INSERT INTO Material
VALUES
('Amakumo Fruit', 'The fruit of the Amakumo Grass, which grows on Seirai Island. You c
an hear it crackling with a tiny current if you hold it up to your ear.'),
('Beryl Conch', 'A conch-like structure that gives off a faint glow. Despite the name,
it is not a shell but something condensed from pure elemental energy.'),
('Calla Lily', 'A flower that grows near water sources. When cooked, the petals have a
chunky texture, yet are sweet and a little bitter.'),
('Cor Lapis', 'A precious crystal of condensed pure Geo element that usually grows alo
ng with other minerals. It''s also commonly called "Cor Petrae.'),
('Crystal Marrow', 'A crystal that contains a sliver of Tatarigami power. Adding this
material during smelting will greatly increase the strength and toughness of metal
s.'),
('Pile ''Em Up', 'A rich, meaty dish. Originally a Mondstadt dish made of steaks, pota
toes, and cheese, it has since become synonymous with Ludi Harpastum.'),
('Pure Water', 'It is said to be the legacy of a genius potioneer. It can draw out the
purest strength from within one''s body'),
```

('Almond Tofu', 'A dessert made out of almond. It has a silky-smooth texture with a long-lasting aroma of almond. It''s named tofu only because of its tofu-like shape.'),
('Baklava', 'A traditional Sumeru dessert. This puff pastry contains chopped nuts and has been baked after having butter drizzled atop it — and not forgetting some syrup once it comes out of the oven. Some researchers will specially order this veritable "fortress of sweetness" to replenish their energies before an exam. This is also why this dish has great pride of place as the Akademiya''s favorite dessert.'),
('Bamboo Shoot Soup', 'A soup dish that''s been stewed for a good long while. The meat and ham have been diced into small pieces, and the soup has been kept on low heat till it turned milky white. The process has brought out the distinct flavors of both kinds of meat, making for an especially tasty soup.'),
('Sharp Arrowhead', 'A well-made arrowhead. Sharp enough to penetrate armor with the ease of a rock through the surface of water.'),
('Weathered Arrowhead', 'An old arrowhead coated in blood. The arrowhead has long since lost its sharpness and thus its use as a weapon. However it represents the pride of a hunter and acts as both an amulet and a medal.'),
('Damaged Mask', 'A broken bone mask that once belonged to some hilichurl. Now more broken than complete, it can no longer perform its primary function.'),
('Shivada Jade Gemstone', 'Character Ascension material. "Sorry... to also have you shoulder the grievances of the world." Since you could endure my bitter cold, you must have the desire to burn? "Then, burn away the old world for me."'),
('Shadow of the Warrior', 'A fragment of power that you obtained from defeating Childe, who had unleashed the might of his Delusion. It is the product of a will to fight that has been honed over countless slaughters. If humans do indeed have destinies, then his must surely have been twisted by such deeds. Why else, then, would he always be at the heart of every conflict?'),
('Echo of Scorching Might', 'A long time ago, the people of the Lord of Deserts carved these imperial insignias based on robust beetles to memorialize the bright sun that marked the shifting of day and night, as well as the infinity of such times. Though the name of that Lord is no longer mentioned, these imperial insignias have been preserved through time, each bearing a faint ambiance of those past glories. These insignias travel with the descendants of the Eremite Tribe, silently telling the tales of their then-Lord.'),
('Mora', 'Common currency. The one language everybody speaks.'),
('Brilliant Diamond Silver', 'Character Ascension material. "Welcome to this world."'),
('Brilliant Diamond Fragment', 'Character Ascension material. "Welcome to this world."'),
('Brilliant Diamond Chunk', 'Character Ascension material. "Welcome to this world."'),
('Shackles of the Dandelion Gladiator', 'Vennessa was not truly bound by her chains. If she had so wished, no ordinary physical constraints forged in Mondstadt could have held her, for the land there yielded no ore of exceptional quality, nor did it possess the divine flame of her ancestral home. She was only bound by her responsibility to take care of her tribespeople.'),
('Dream of the Dandelion Gladiator', 'Vennessa may have been freed from slavery, but she then found herself subject to many other, even greater forms of bondage. What began as a duty to her tribespeople extended to all of Mondstadt, then to the concept of freedom itself, and beyond a point even to the whole world. What she really hoped for, in truth, was that the world might grow stronger.'),
('Echo of the Scorching Might', 'A long time ago, the people of the Lord of Deserts carved these imperial insignias based on robust beetles to memorialize the bright sun that marked the shifting of day and night, as well as the infinity of such times. Though

the name of that Lord is no longer mentioned, these imperial insignias have been prese
rved through time, each bearing a faint ambiance of those past glories. These insignia
s travel with the descendants of the Eremite Tribe, silently telling the tales of thei
r then-Lord.');

Consumable(**Name**, Recipe)

```
INSERT INTO Consumable
VALUES
('Pile ''Em Up', 'ATK-Boosting Dishes'),
('Pure Water', 'ATK-Boosting Dishes'),
('Almond Tofu', 'ATK-Boosting Dishes'),
('Baklava', 'ATK-Boosting Dishes'),
('Bamboo Shoot Soup', 'Recovery Dishes');
```

AscensionMaterial(**Name**, Tier, Type)

```
INSERT INTO AscensionMaterial
VALUES
('Brilliant Diamond Silver', 2, 'Character'),
('Brilliant Diamond Fragment', 3, 'Character'),
('Brilliant Diamond Chunk', 4, 'Character'),
('Shackles of the Dandelion Gladiator', 4, 'Weapon'),
('Dream of the Dandelion Gladiator', 5, 'Weapon'),
('Echo of Scorching Might', 2, 'Weapon');
```

Region(Name, Lore)

```
INSERT INTO Region
VALUES
('Mondstadt', 'A city of freedom that lies in the northeast of Teyvat. From amongst mo
untains and wide-open plains, carefree breezes carry the scent of dandelions — a gift
from the Anemo God, Barbatos — across Cider Lake to Mondstadt, which sits on an island
in the middle of the lake.'),
('Liyue', 'A bountiful harbor that lies in the east of Teyvat. Mountains stand tall an
d proud alongside the stone forest, that, together with the open plains and lively riv
ers, make up Liyue''s bountiful landscape, which shows its unique beauty through each
of the four seasons. Just how many gifts from the Geo God lie in wait amongst the rock
s of Liyue''s mountains?'),
('Inazuma', 'An Isolated Archipelago Far East of Teyvat. Overcome endless thunderstorm
s and set foot on the islands of red maple and cherry blossoms. On winding shores and
towering cliffs, and in forests and mountains full of secrets, witness the Eternity pu
rsued by Her Excellency, the Almighty Narukami Ogosho.'),
('Sumeru', 'The city of scholars located in the west-central part of Teyvat. A fantast
```

ical nation of both lush rainforest and barren desert, where countless fruits of wisdo
m grow and are buried. Whether Travelers travel from afar through the forest to reach
the academy city or delve deep into the desert to discover the historical ruins of the
red desert, a wealth of valuable knowledge awaits them here.'),
('Fontaine', 'A terrestrial sea in the center of Teyvat. Following the direction of pu
re currents, crossing wilderness, the depths of the forests and vastness of the sea of
sand, arriving at the origin of all the waters of the continent. At the top of the wat
erfall, in the depths of the capital atop the terrestrial sea... a story that has neve
r been heard, a legend that has been forgotten, like a lost kingdom sunken beneath the
waves, yearning for a bard to sing its drowned songs.');

Subregion(**RName**, <u>SubName</u>, SubLore, ZoneType)

```
INSERT INTO Subregion
VALUES
('Mondstadt', 'Wolvendom', 'A deep, dark woodland, where the silence sends chills down
the spine. A wolf pack dwells in the shadows — one so dangerous that even the most fea
rless of hunters do not venture there lightly. The howling of the wolves at night can
be heard from a long distance.'),
('Liyue', 'Qiongji Estuary', 'Qiongji Estuary has 4 notable sub areas which are Guili
Plains, Luhua Pool, Mingyun Village, Yaoguang Shoai'),
('Inazuma', 'Narukami Island', 'A sight witnessed by all inbound travelers to Inazuma.
The Grand Narukami Shrine and Sacred Sakura on the mountain, and the city of Inazuma o
n the coast.'),
('Sumeru', 'Vanarana', 'No matter how dark the sky and land may get, as long as your s
pirit emits warmth like a golden sun, there will always be hope'),
('Fontaine', 'Fontaine Research Institute of Kinetic Energy Engineering Region', 'It w
as largely destroyed in an explosion long ago. The explosion left behind structures su
ch as Allogravity-Condensed Water Bodies floating in the air. Scientists such as Edwin
Eastinghouse were researching the properties of Arkhium. The institute is also the sit
e of the Experimental Field Generator boss.');
```

Weapon(<u>Name</u>, Tier, Lore, SetName, Dmg, Ability, WeaponType)

```
INSERT INTO Weapon
VALUES
('Amos'' Bows', 5, 'An extremely ancient bow that has retained its power despite its o
riginal master being long gone. It draws power from everyone and everything in the wor
ld, and the further away you are from that which your heart desires, the more powerful
it is.', 46, 'Increases Normal Attack and Aimed Shot DMG by 18%. Increases DMG by 12%
for every 0.1s that an arrow is in flight. Stacks up to 5 times on each arrow.', 'Bo
w'),
('Tulaytullah''s Remembrance', 5, 'Normal Attack SPD is increased by 10%. After the wi
elder unleashes an Elemental Skill, Normal Attack DMG will increase by 4.8% every seco
nd for 14s. After hitting an opponent with a Normal Attack during this duration, Norma
l Attack DMG will be increased by 9.6%. This increase can be triggered once every 0.3
s. The maximum Normal Attack DMG increase per single duration of the overall effect is
```

```
48%.', 48, 'A bell crafted of deep sapphire and sterling silver. Its echoes are crisp
as they are distant.', 'Catalyst'),
('Wolf''s Gravestone', 5, 'Increases ATK by 20%. On hit, attacks against enemies with
less than 30% HP increases all party members'' ATK by 40% for 12s. Can only occur once
every 30s.',  46, 'A longsword used by the Wolf Knight. Originally just a heavy sheet
of Iron given to the knight by a blacksmith from the city, it became endowed with lege
ndary power owing to his friendship with the wolves.', 'Claymore'),
('Prototype Crescent', 4, 'Aimed Shot hits on weak points increase Movement SPD by 10%
and ATK by 36% for 10s.', 41, 'A prototype longbow discovered in the Blackcliff Forge.
The arrow fired from this bow glimmers like a ray of moonlight.', 'Bow'),
('Freedom-Sworn', 5, 'Increases DMG by 10%. When characters with Freedom-Sworn trigger
Elemental Reactions, they gain a Sigil of Rebellion (once every 0.5s). This triggers e
ven if they aren''t on the field. When you reach 2 Sigils, they will be consumed which
grants nearby party members 20% ATK and 16% Normal, Charged, and Plunging Attack DMG f
or 12s. Once triggered, you gain no Sigils for 20s. The same buffs from the Millennial
Movement series do not stack.', 46, 'A straight sword, azure as antediluvian song, and
as keen as the oaths of freedom taken in the Land of Wind.', 'Sword');
```

ArtifactSet(<u>SetName</u>, 4PieceBonus, 2PieceBonus, Tier)

```
INSERT INTO ArtifactSet
VALUES
('Blizzard Strayer', 'When a character attacks an enemy affected by Cryo, their CRIT R
ate is increased by 20%. If the enemy is Frozen, CRIT Rate is increased by an addition
al 20%.', 'Cryo DMG Bonus +15%', 5),
('Desert Pavillion Chronicle', 'When Charged Attacks hit opponents, the equipping char
acter''s Normal Attack speed will increase by 10% while Normal, Charged, and Plunging
Attack DMG will increase by 40% for 15s', 'Anemo DMG Bonus +15%', 5),
('Gladiator's Finale', 'If the wielder of this artifact set uses a Sword, Claymore, or
Polearm, increases their Normal Attack DMG by 35%.', 'ATK +18%.', 5),
('Wanderer's Troupe', 'Increases Charged Attack DMG by 35% if the character uses a Cat
alyst or a Bow.', 'Increases Elemental Mastery by 80.', 5),
('Berserker', 'When HP is below 70%, CRIT Rate increases by an additional 24%.', 'CRIT
Rate +12%', 5);
```

Artifact(**SetName**, <u>Name</u>, Type, Description)

```
INSERT INTO Artifact
VALUES
('Wanderer's Troupe', 'Troupe's Dawnlight', 'Flower of Life', 'A small flower-shaped i
nsignia. There seems to be music coming from it. Among the members of the troupe was a
charismatic swordswoman. Beautiful as the light on water, elegant as the chirping lar
k. Her every slash hummed a tune of the wind. The end of each song and dance was like
the sun after the rain. Dust has since settled, and both the stage and life itself fee
l emptier for the absence of her music. Both her music and her sword were as lethal as
they were beautiful. This was in keeping with the troupe''s performances, which were i
ntended for two very different audiences. For the audience of foes, the music drifted
```

```
far beyond the stage.'),
('Wanderer's Troupe', 'Concert's Final Hour', 'Sands of Eon', 'The troupe''s hourglas
s, which is also a harp. The tune becomes deeper with the passage of time. When the pe
rformance was coming to an end, the troupe would play this harp. As time passed, the t
une of the harp became deeper. The sound of the harp dying down marked the end of the
show. Everything has an end, and the troupe was no exception. One by one, each member
of the troupe met their fate, and their instruments were buried deep in the dust. As t
he harp fell silent, the final sound heard from the musical troupe was the faint trick
le of sand as it slid down the hourglass one final time.'),
('Blizzard Strayer', 'Icebreaker's Resolve', 'A feather of a bird of prey that did not
originally belong in the winter chill. It is cold to the touch. And when you do touch
it, it is as if you can hear cries in the snowstorm, unbowed but bereft of hope. With
no nest or shelter, the bird faced the storms proudly. This feather has been assailed
with coalescing ice and snow, leaving it coated in pearls of frost. It once came from
a falcon in flight and was plucked violently from that bird by the frigid winds. It dr
ifted a while in the air before the weight of the frost dragged it back down to the gr
ound.'),
('Berserker', 'Berserker's Battle Mask', 'Bathed in the flames that devoured his homel
and, the berserker''s face was no longer recognizable. The iron mask became joined wit
h his flesh, permanently branding his face with a heartless countenance. Then, in a fi
erce battle, his horrifying mask was split into two by his opponent. The cracks of the
mask tore apart the flesh that had long stuck to it. But neither pain nor blood could
stop the berserker''s unfaltering footsteps. The berserker kept roaring until the fres
h blood covered the black clots hardened on his face.'),
('Gladiator's Finale', 'Gladiator's Intoxication', 'A lavish goblet made of gold. It w
as a gift from the champion gladiator''s master. From this goblet the champion gladiat
or drank, be of fine wine or the blood of the defeated. Another victory for the gladia
tor. Covered in wounds, he dedicated the victory to his master. More intoxicating and
pain-numbing than the fine wine was the victory, honor, and applause from the crowd. T
he master allowed him to join the feast and presented him with this goblet. It was an
exquisite goblet, made specially for him. A symbol of how much his master cared. But t
he golden chains of vanity had bound the gladiator, and the poisonous snake of desire
had strangled him. By pausing to wait for the wine of victory, the gladiator missed hi
s chance to seize a fleeting chance at freedom.');
```

Stat(ID, CritRate, CritDMG, Defense, AttackDMG, HP)

```
INSERT INTO Stat
VALUES
(1, 0.15, null, null, null, null),
(2, null, 0.5, 169, 90, 2632),
(3, 0, null, 163.13, 88.04, 2731),
(4, null, null, null, null, 30, null),
(5, null, null, null, 505, 183, 1313),
(6, null, null, 505, 152, 1248),
(7, null, null, 505, 127, 510),
(8, null, null, 505, 152, 510),
(9, null, null, 505, 152, 437),
(10, null, null, 505, 183, 1313),
```

```
(11, null, null, 505, 34, 58),
(12, 0.05, 0.5, 44.27, 26.44, 807),
(13, 0.05, 0.5, 63, 23, 1039),
(14, 0.05, 0.5, 67, 16, 1012),
(15, 0.1, null, null, null, 320),
(16, null, null, null, null, 81),
(17, null, null, null, null, 0.28),
(18, null, null, null, null, 620),
(19, null, null, null, null, 645),
(20, null, null, 0.087, 0.07, 0.07),
(21, null, null, null, 47, null),
(22, 0.05, 0.5, 63, 23, 1020);
```

Enemies(<u>Name</u>, Description, Lore, **StatID**)

```
INSERT INTO Enemies VALUES
('Andrius', 'Andrius, also known as Lupus Boreas, was a powerful god in Mondstadt best
known for his war against Decarabian, the God of Storms, during the Archon War. Toward
s the end of the era, Andrius chose to let his physical body die, leaving behind his s
pirit to watch over the land of Mondstadt.', 10),
('Tartaglia', 'Tartaglia uses the tall male model. He has short ginger hair and dull b
lue eyes. He wears a red Fatui mask pulled off to the left side of his head, and a bea
ded earring with a red crystal on his left ear. A few lighter blond streaks can be see
n in his hair, with one prominent one on the left side of his bangs. Tartaglia wears h
is Blades of Glory outfit during the first phase of his Golden House battle. After the
first phase, Tartaglia''s clothes turn from gray to black, he wears his mask on his fa
ce, and his Hydro Vision appears to be supplanted by his Electro Delusion. After the s
econd phase, he undergoes a full outfit change and becomes larger, and his Vision reap
pears in the empty slot on his right chest while his Delusion moves to the center of h
is belt. Both his Vision and Delusion also obtain more prominent black and silver casi
ngs.', 9),
('Electro Hypostasis', 'The Electro Hypostasis is a Normal Boss challenge found in Cap
e Oath, Galesong Hill, Mondstadt.', 8),
('Cryo Regisvine', 'Elemental hypostases are the highest forms of elemental structure
s, usually formed either at a location bursting with elemental energy or at a clogged
ley line. Elemental hypostases have developed defensive mechanisms based on their elem
ental attributes', 'A monster formed from a vine that was imbued with the essence of b
iting frost within the ley lines. Some studies suggest that plants are like the organs
of the world, harmonizing the turbulent elemental energies of the ley lines. Concrete
examples of this phenomena are Mist Flowers, Whopperflowers, and the like, which brim
over with elemental energy. In certain circumstances, certain plants will turn into cr
eatures of monstrous size and intent — such as the Cryo Regisvines — in the course of
many years.', 7),
('Aeonblight Drake', 'The Aeonblight Drake is a Normal Boss challenge found in Devanta
ka Mountain, Ardravi Valley, Sumeru.', 'This dragon-shaped combat machine is a being t
hat inspires fear, much like the lord who once ruled these vast lands. This mysteriou
s, tireless mechanical monstrosity seems to be proof that the now-destroyed realm had
reached heights that mortals should never have.', 5),
('Pyro Hilichurl Shooter', 'The primitive wandering inhabitants of Teyvat''s wildernes
```

```
ses. These archers wield simple crossbows, and their arrowheads are coated with a thin
layer of flammable material that can set their targets on fire. El Musk of the previou
s generation believed that this is an innovation by brighter hilichurls who wished to
cook their game after hunting it.', NULL, 11);
```

Boss(**<u>Name</u>**, RequiredResin, Phases, ElementalType)

```
INSERT INTO Boss VALUES
('Andrius', 0, 2, 'Cryo'),
('Tartaglia', 40, 3, 'Hydro'),
('Electro Hypostasis', 40, 1, 'Electro'),
('Cryo Regisvine', 40, 1, 'Cryo'),
('Aeonblight Drake', 40, 1, 'Cryo');
```

Character(<u>Name</u>, ElementalType, Gender, WeaponType, Tier, Description, **StatID**, **RegionName**)

```
INSERT INTO Character VALUES
('Yae Miko', 'Electro', 'Female', 'Catalyst', 5, 'Lady Guuji of the Grand Narukami Shr
ine. Also serves as the editor-in-chief of Yae Publishing House. Unimaginable intellig
ence and cunning are hidden under her beautiful appearance.', 12, 'Inazuma' ),
('Kazuha', 'Anemo', 'Male', 'Sword', 5, 'A wandering samurai from Inazuma who is curre
ntly with Liyue''s Crux Fleet. A gentle and carefree soul whose heart hides a great ma
ny burdens from the past.', 13, 'Inazuma'),
('Ganyu', 'Cryo', 'Female', 'Bow', 5, 'The secretary at Yuehai Pavilion. The blood of
the qilin, an illuminated beast, flows within her veins.', 2, 'Liyue'),
('Wanderer', 'Anemo', 'Male', 'Catalyst', 5, 'A wayfaring figure whose identity is a m
ystery. He dresses like a mountain ascetic, but he certainly does not act the part.',
3, 'Sumeru'),
('Noelle', 'Geo', 'Female', 'Claymore', 4, 'A maid who faithfully serves the Knights o
f Favonius. She dreams of joining their ranks someday.', 14, 'Mondstadt'),
('Childe', 'Hydro', 'Male', 'Sword', 5, '"Childe" Tartaglia, Eleventh of the Fatui Har
bingers. He draws power from the ominous Delusion he possesses and fights using martia
l arts that he learned in the land of darkness. He is a pure warrior with an insatiabl
e lust for battle.', 22, 'Liyue');
```

BossDrops(**<u>BossName</u>**, **<u>ArtifactSetName</u>**)

```
INSERT INTO BossDrops VALUES
('Andrius', 'Gladiator''s Finale'),
('Andrius', 'Wanderer''s Troupe'),
('Tartaglia', 'Gladiator''s Finale'),
```

```
('Electro Hypostasis', 'Gladiator''s Finale'),
('Cryo Regisvine', 'Wanderer''s Troupe');
```

EnemyFoundAt(**EnemyName**, **RegionName**)

```
INSERT INTO EnemyFoundAt VALUES
('Electro Hypostasis', 'Mondstadt'),
('Tartaglia', 'Liyue'),
('Pyro Chilichurl Shooter', 'Mondstadt'),
('Pyro Chilichurl Shooter', 'Liyue'),
('Pyro Chilichurl Shooter', 'Sumeru');
```

EnemyDrops(**EnemyName**, **MaterialName**)

```
INSERT INTO EnemyDrops VALUES
('Pyro Chilichurl Shooter', 'Sharp Arrowhead'),
('Pyro Chilichurl Shooter', 'Weathered Arrowhead'),
('Pyro Chilichurl Shooter', 'Damaged Mask'),
('Tartaglia', 'Shadow of the Warrior'),
('Aeonblight Drake', 'Shivada Jade Gemstone');
```

CharacterCanWield(**CharacterName**, **WeaponName**, Rank)

```
INSERT INTO CharacterCanWield VALUES
('Wanderer', 'Tulaytullah''s Remembrance', 1),
('Ganyu', 'Amos'' Bow', 1),
('Ganyu', 'Prototype Crescent', 2),
('Kazuha', 'Freedom-Sworn', 1),
('Yae Miko', 'Tulaytullah''s Remembrance', 1);
```

CharacterArtifacts(**CharacterName**, **ArtifactSetName**, Rank)

```
INSERT INTO CharacterArtifacts VALUES
('Ganyu', 'Wanderer''s Troupe', 1),
('Ganyu', 'Blizzard Strayer', 2),
('Wanderer', 'Desert Pavillion Chronicle', 1),
('Wanderer', 'Gladiator''s Finale', 2),
('Kazuha', 'Desert Pavillion Chronicle', 1);
```

RequiredMaterialForWeapon(**WeaponName**, **AscensionMaterial**, Quantity)

```
INSERT INTO RequiredMaterialForWeapon VALUES
('Tulaytullah''s Remembrance', 'Echo of Scorching Might', 5),
('Amos'' Bow', 'Shackles of the Dandelion Gladiator', 14),
('Amos'' Bow', 'Dream of the Dandelion Gladiator', 6),
('Freedom-Sworn', 'Shackles of the Dandelion Gladiator', 14),
('Freedom-Sworn', 'Dream of the Dandelion Gladiator', 6);
```

MaterialsFoundAt(**SubRegionName, MaterialName**)

```
INSERT INTO MaterialsFoundAt VALUES
('Liyue', 'Cor Lapis'),
('Inazuma', 'Amakumo Fruit'),
('Mondstadt', 'Calla Lily'),
('Fontaine', 'Beryl Conch'),
('Inazuma', 'Crystal Marrow');
```

CharacterInteractions(**Char1**, **Char2**, **Battle**, Contract, Friend)

```
INSERT INTO CharacterInteractions VALUES
('Childe', 'Zhongli', null, 'Owe Money', true),
('Yae Miko', 'Kazuha', 'Vision Hunt Decree', null, false),
('Ganyu', 'Zhongli', 'Liyue Archon War', null, false),
('Wanderer', 'Childe', null, null, false),
('Wanderer', 'Nahida', 'Dendro Archon Conflict', null, true);
```

BattleInRegion(Battle, **Region**)

```
INSERT INTO BattleInRegion VALUES
('Enkanomiya clash with the Dragonheir of the Depths', 'Inazuma'),
('Fall of Decarabian''s Mondstadt', 'Mondstadt'),
('Guili Assembly', 'Liyue'),
('Dendro Archon Conflict', 'Sumeru'),
('Vision Hunt Decree', 'Inazuma'),
('Liyue Archon War', 'Liyue');
```

ConsumableBoosts(**ConsumableName**, **StatID**)

```
INSERT INTO ConsumableBoosts VALUES
('Pile ''Em Up', 1),
('Pure Water', 15),
```

```
('Almond Tofu', 16),
('Baklava', 1),
('Bamboo Shoot Soup', 17),
('Bamboo Shoot Soup', 18);
```

RequiredMaterialForCharacter(**CharacterName**, **AscensionMaterialName**, Quantity)

```
INSERT INTO RequiredMaterialForCharacter VALUES
('Ganyu', 'Shivada Jade Gemstone', 6),
('Ganyu', 'Mora', 420000),
('Kazuha', 'Mora', 420000),
('Wanderer', 'Mora', 420000),
('Noelle', 'Damaged Mask', 18);
```

ArtifactEnhances(**StatID**, **ArtifactName**)

```
INSERT INTO ArtifactEnhances VALUES
(19, 'Troupe''s Dawnlight'),
(20, 'Concert''s Final Hour'),
(21, 'Icebreaker''s Resolve'),
(1, 'Troupe''s Dawnlight'),
(2, 'Icebreaker''s Resolve');
```