

Steam: A deconstruction of a VIRTUAL VIDEO GAMES



Creativity



Develops logic



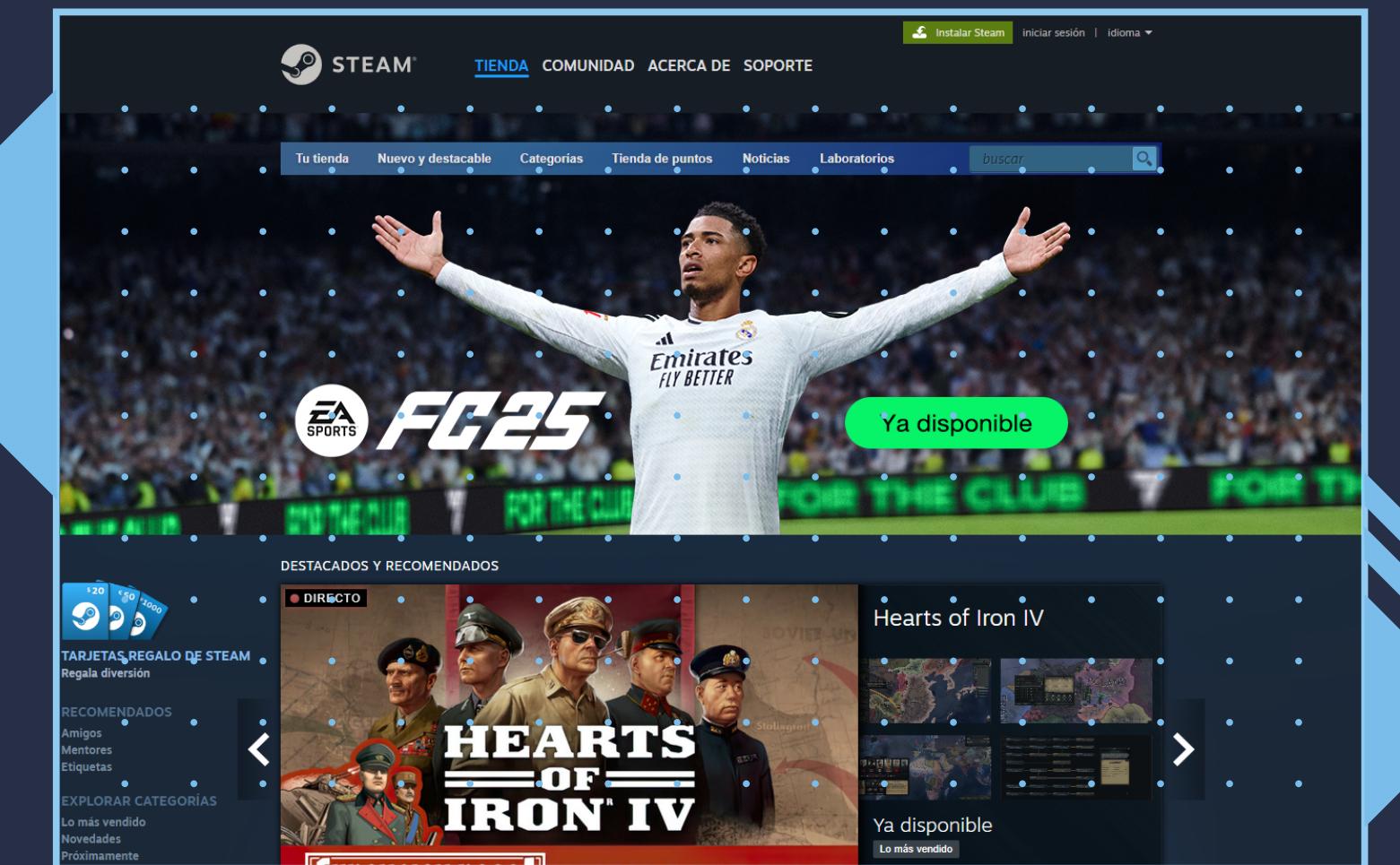
No stress



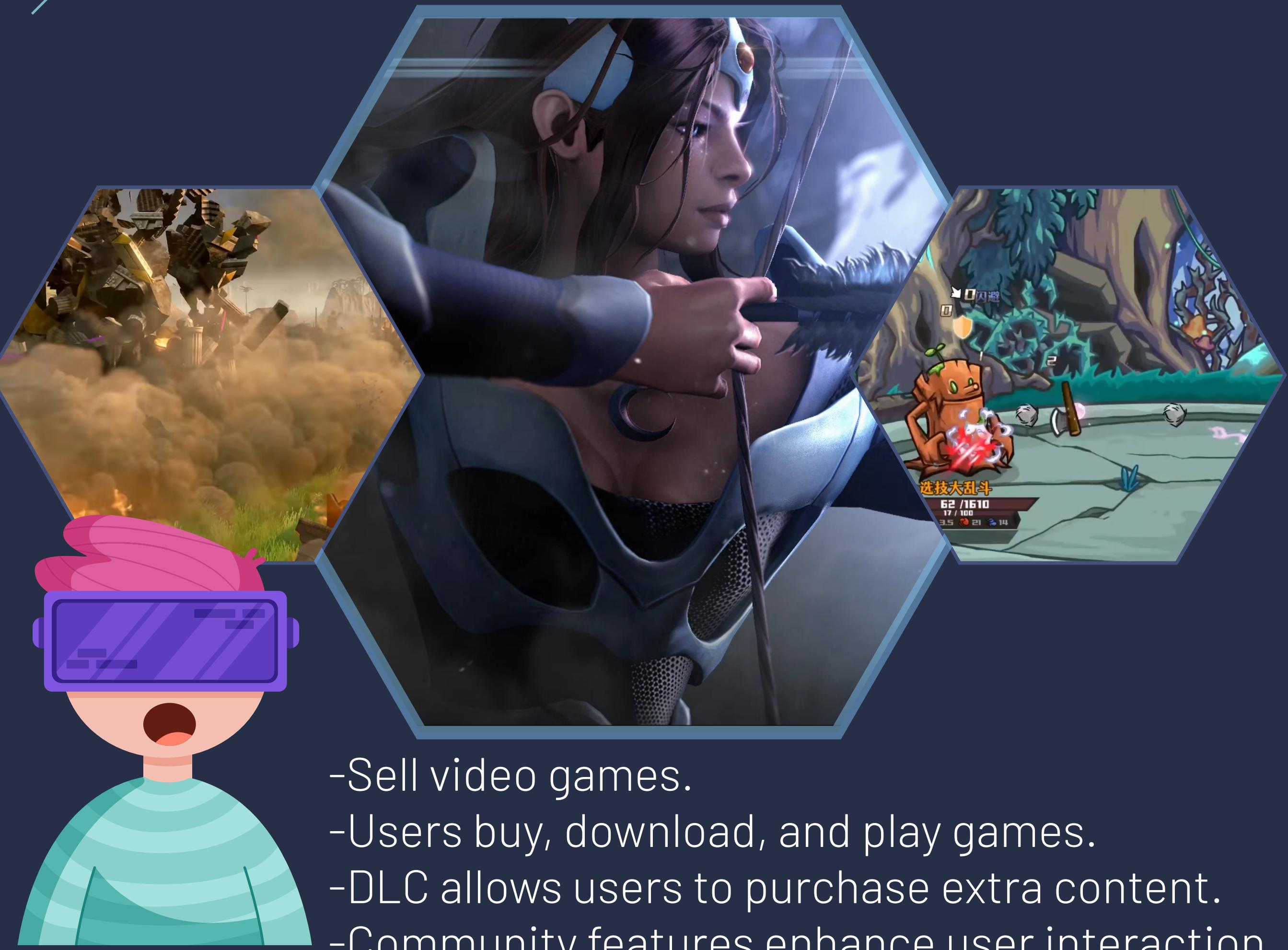
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INTRO

- We are designing a database for a virtual video game store.
- A virtual store is an online place to buy video games.
- Inspired by Steam, a popular platform for games.

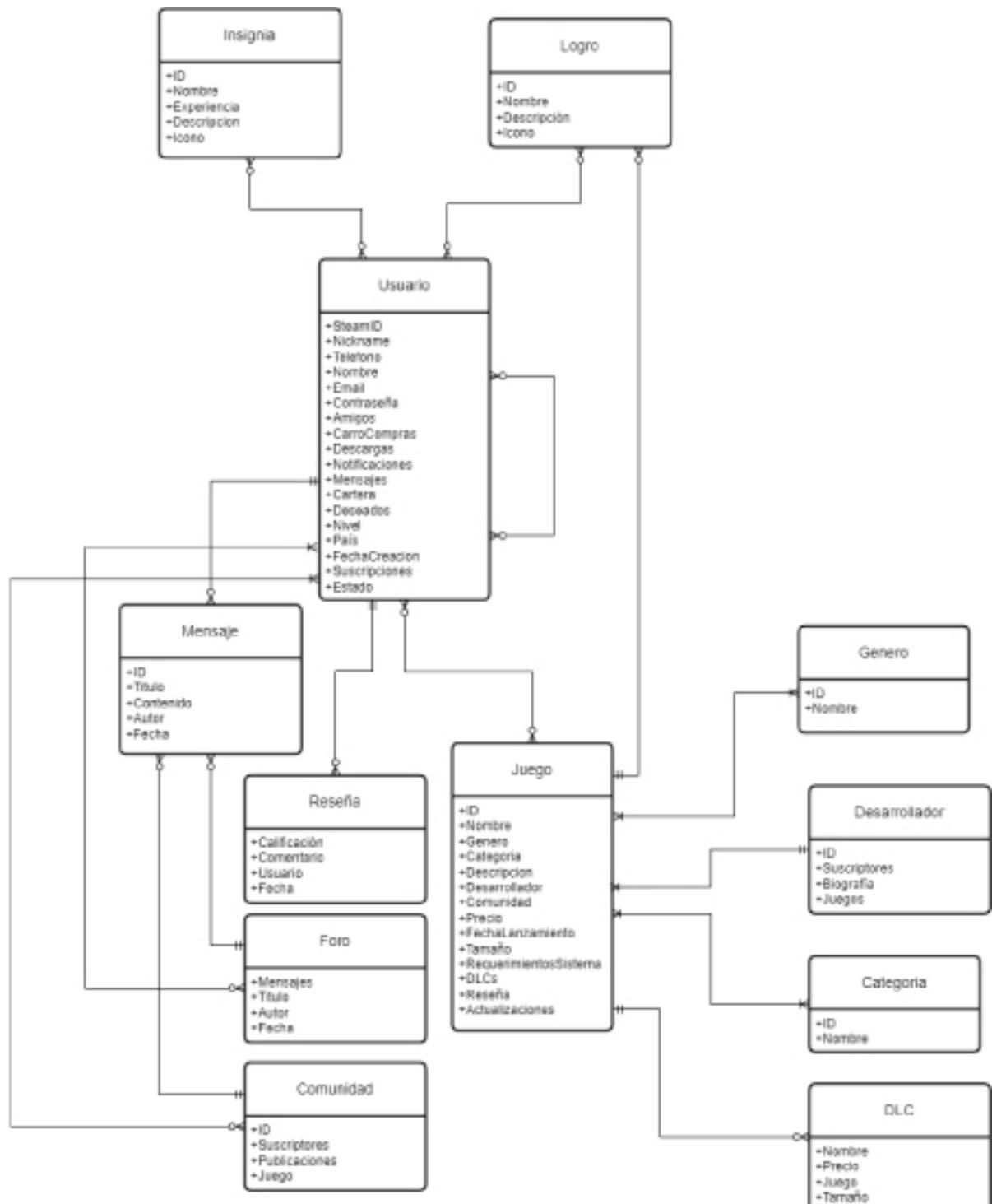


Business Model



- Sell video games.
- Users buy, download, and play games.
- DLC allows users to purchase extra content.
- Community features enhance user interaction.

Processes and info REQUIRED



Important info types:

User information (name, email, etc.)
Game information (name, price, etc.)
Community information
(forum posts, reviews, etc.).

Processes

Include account creation
and buys game.

Steps to Create **THE ERM**



1. Identify entities
(users, games, forums)

2. Define attributes
for each entity

3. Find relationships
between entities

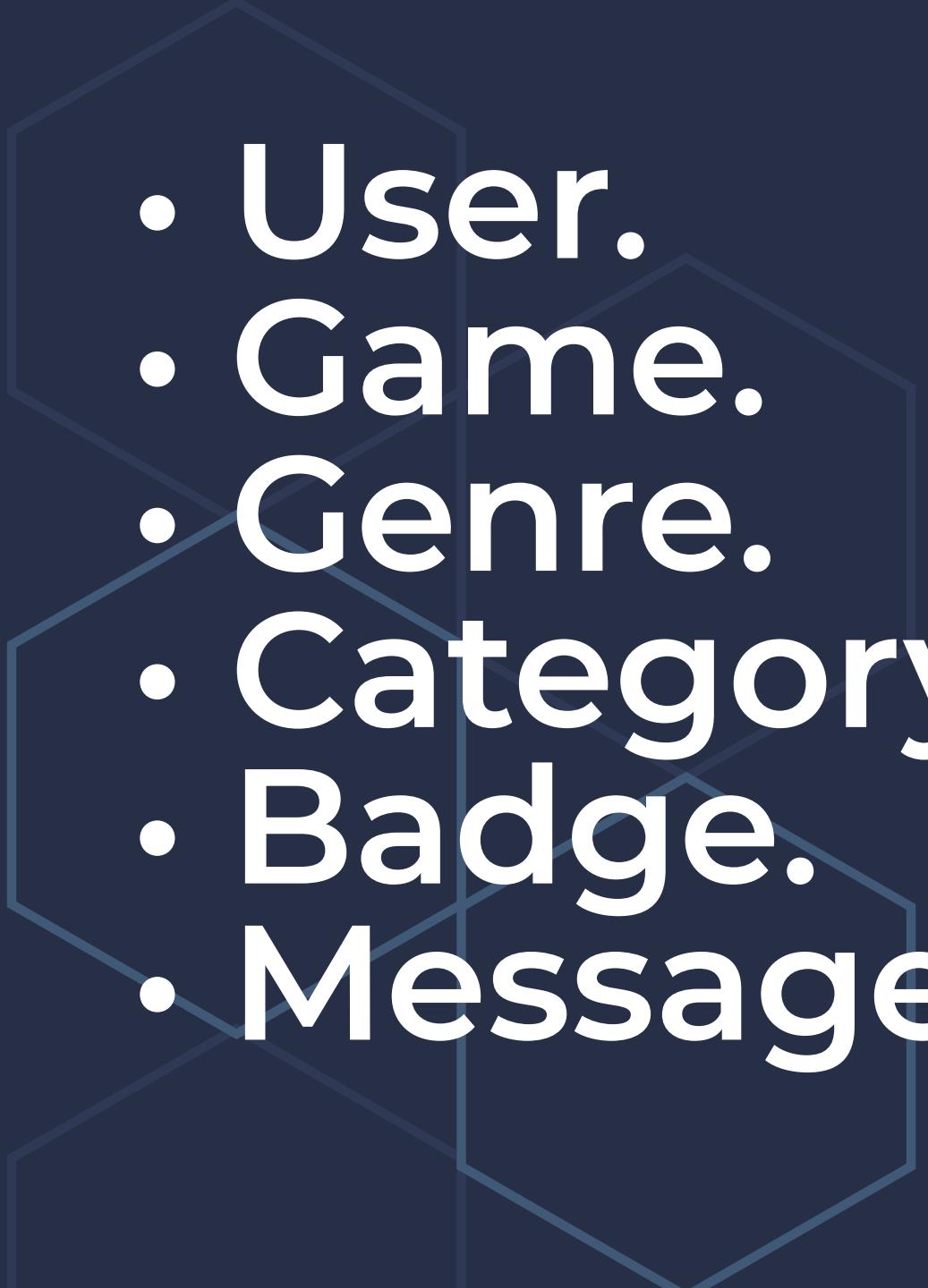
4. Draw the ERM

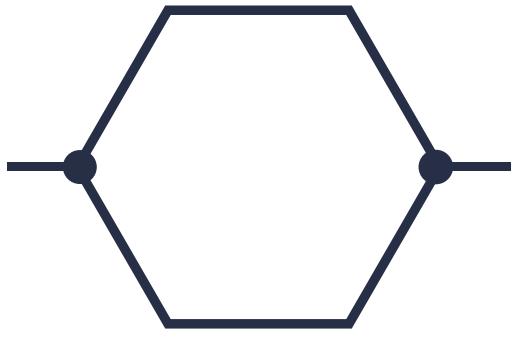
5. Adjust many-to-many
relationships and normalize
the database

Components

Users
Games
Forums

Entities

- 
- User.
 - Game.
 - Genre.
 - Category.
 - Badge.
 - Message.
 - Community.
 - Developer.
 - Achievement.
 - Forum.
 - Review.
 - DLC.



Attributes

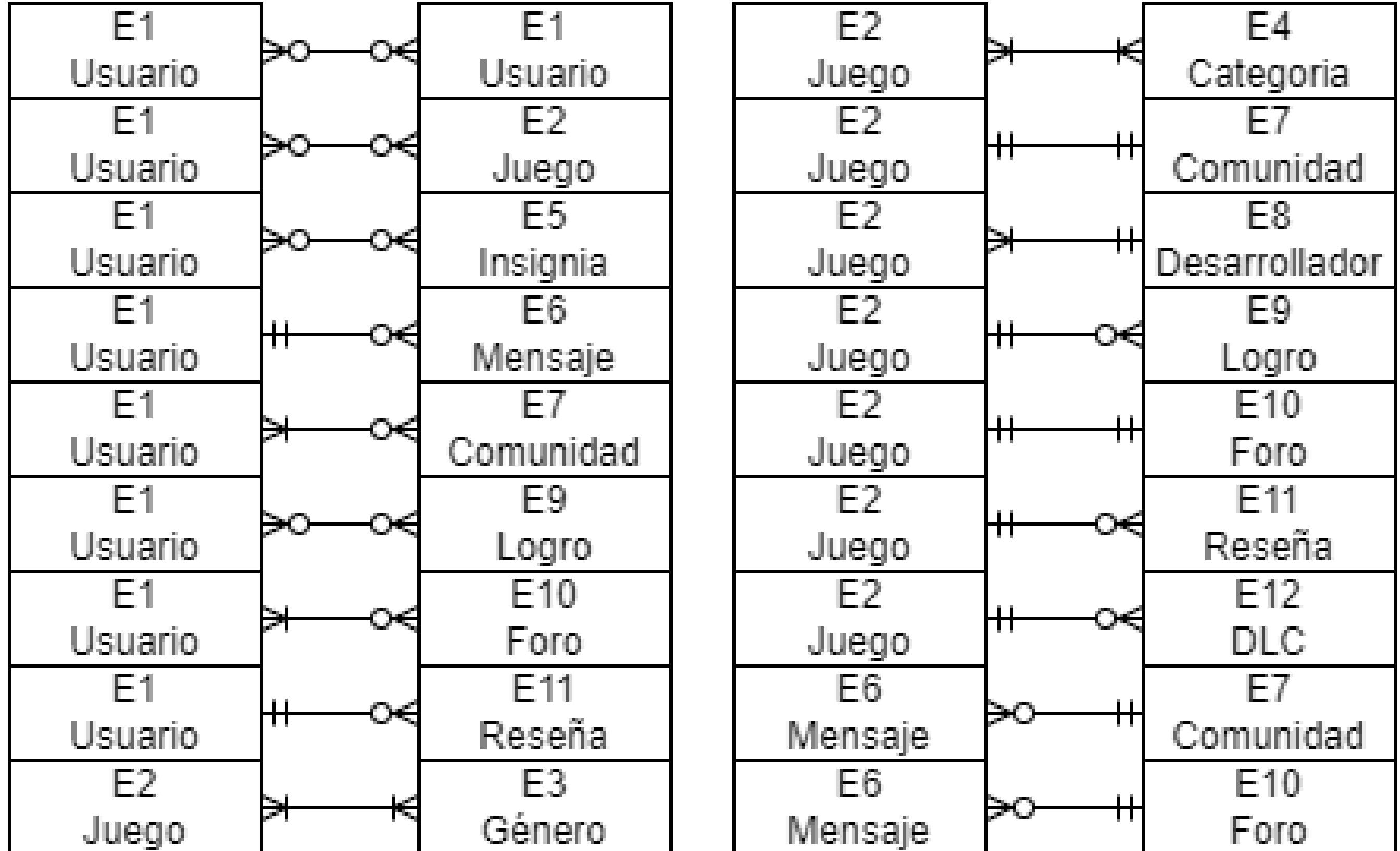
- E1 User: Nickname, Friends, Shopping Cart, Downloads, Notifications, Messages, Wallet, Wish List, Email, Password, Level, Country, Creation Date, Steam ID, Status, Phone, Subscriptions, Name.
- E2 Game: ID, Price, Release Date, Update History, Name, Description, Languages, Achievements, Category, Genre, Review, DLC (Downloadable Content), System Requirements, Community, Developer, Age Restriction, Size.
- E3 Genre: ID, Name.
- E4 Category: ID, Name.
- E5 Badge: ID, Name, Experience, Description, Icon.
- E6 Message: ID, Title, Content, Author, Date.
- E7 Community: ID, Subscribers, Posts, Associated Game.
- E8 Developer: ID, Biography, Associated Games
- E9 Achievement: Name, ID, Description, Icon.
- E10 Forum: Messages, Title, Author, Date.
- E11 Review: Rating, Comment, User, Date.
- E12 DLC: Name, Price, Associated Game, Size.

Relationships

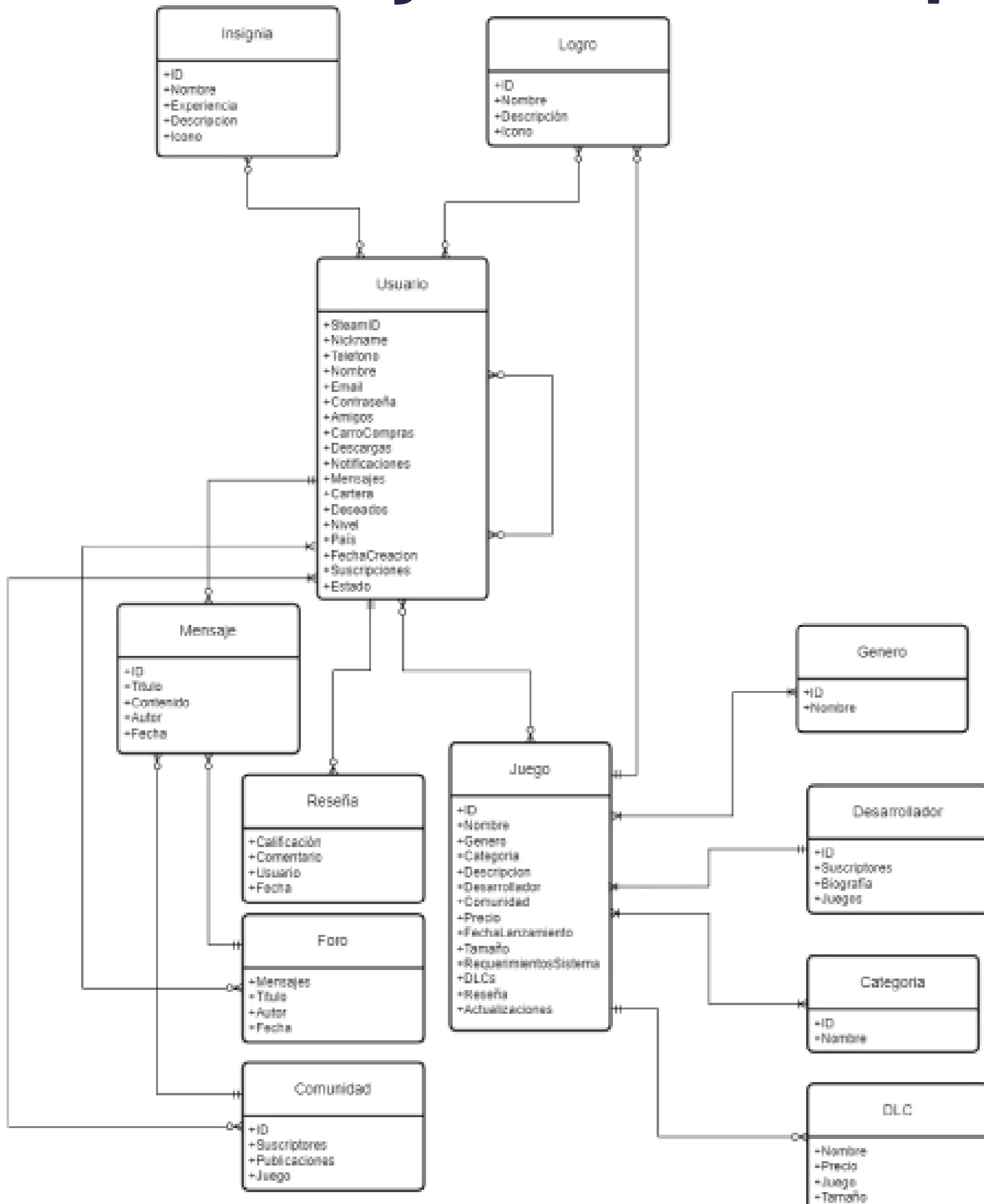
	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12
E1												
E2												
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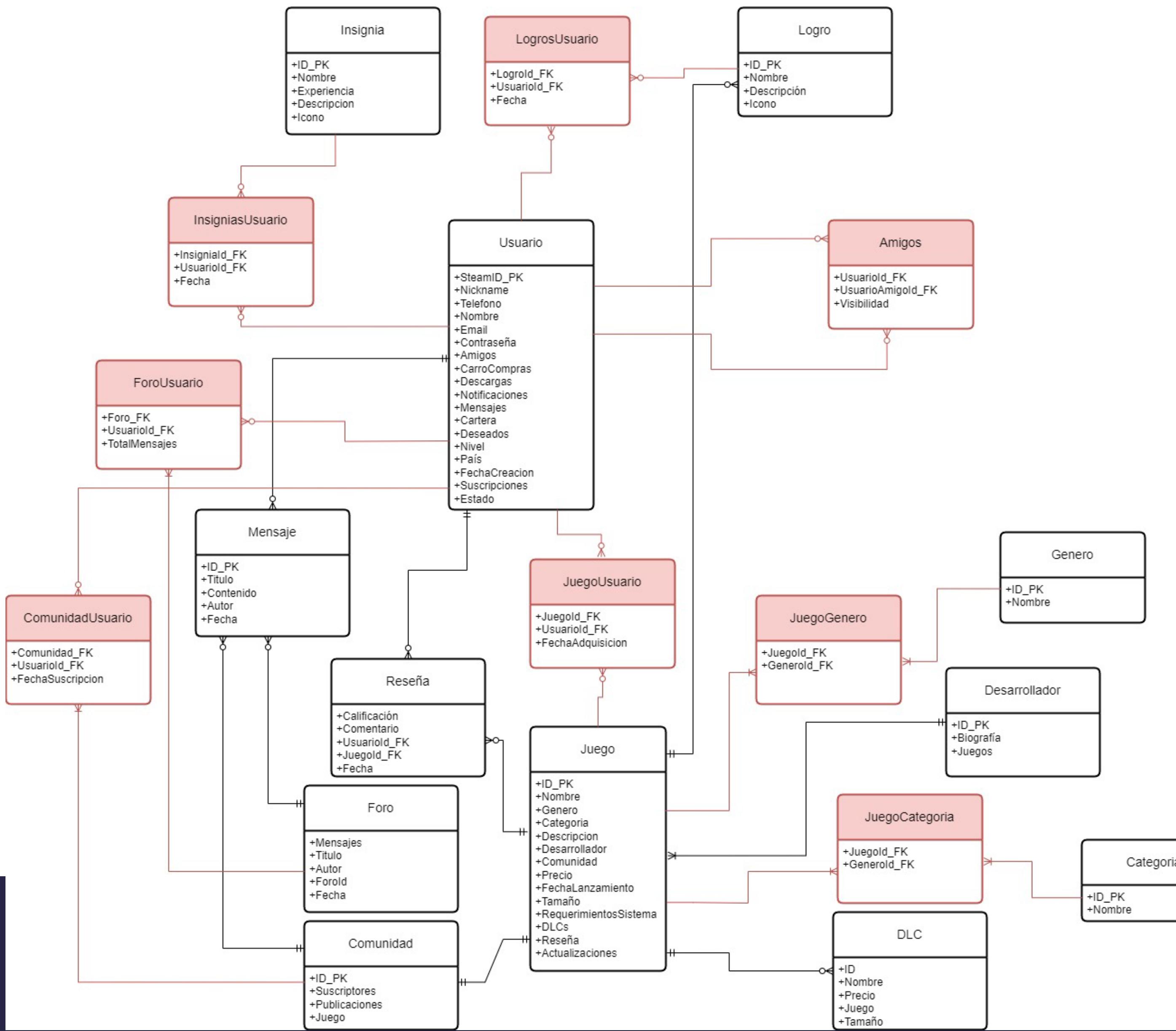
relationships types



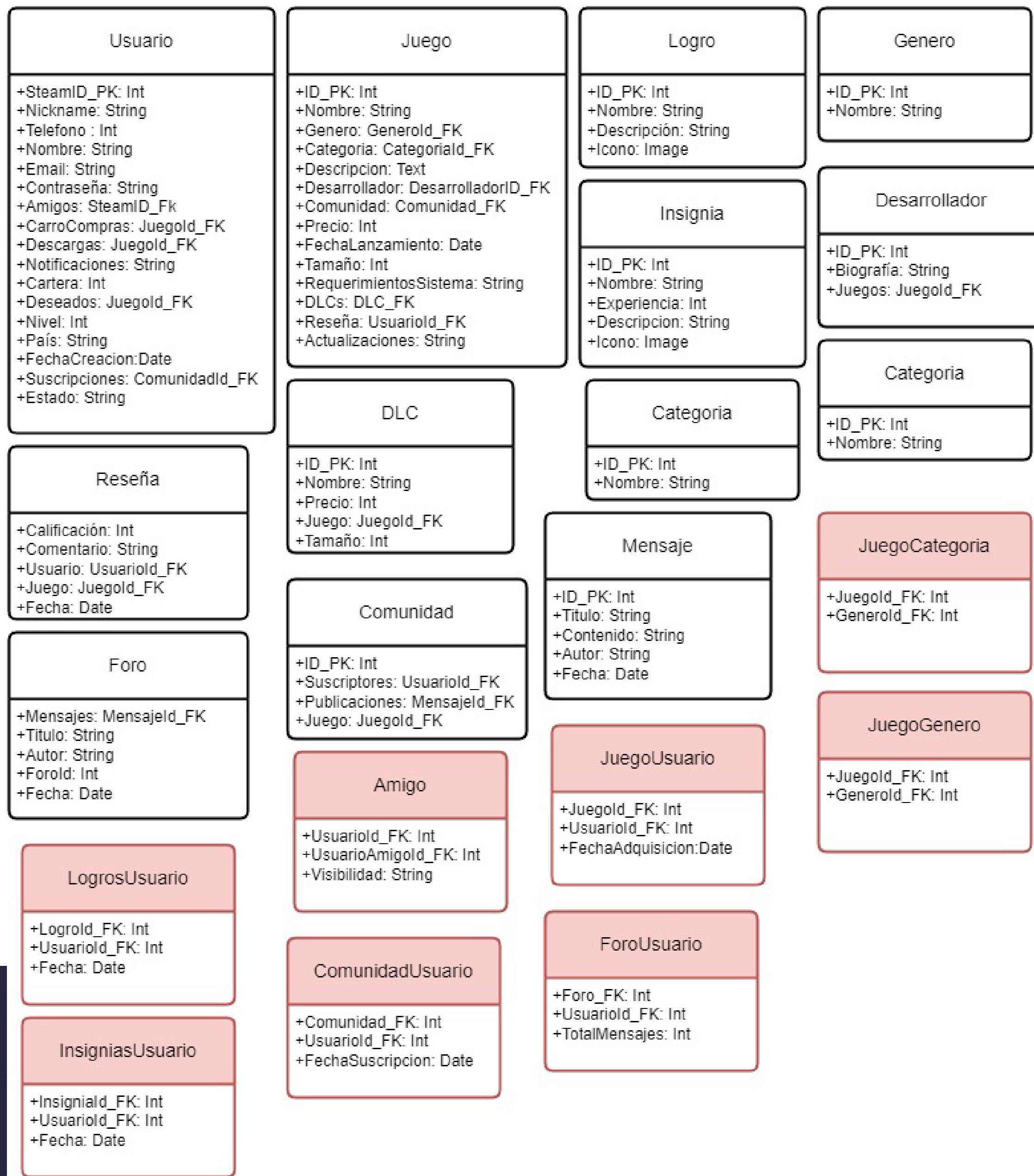
Firts Entity-relationships



Split many to many



Get data-structure ERM



Define constraints properties of data

Usuario	Juego	Logro	Genero
<ul style="list-style-type: none"> +SteamID_PK: Int PRIMARY KEY NOT NULL UNIQUE +Nickname: String(50) NOT NULL UNIQUE +Telefono : Int OPTIONAL +Nombre: String(100) NOT NULL +Email: String NOT NULL UNIQUE +Contrasena: String NOT NULL +Amigos: SteamID_FK NULL FOREIGN KEY +CarroCompras: Juegold_FK NULL FOREIGN KEY +Descargas: Juegold_FK NULL FOREIGN KEY +Notificaciones: String(255) NULL +Cartera: Int NOT NULL DEFAULT 0 +Deseados: Juegold_FK NULL FOREIGN KEY +Nivel: Int NOT NULL DEFAULT 0 +Pais: String(50) NOT NULL +FechaCreacion: Date NOT NULL +Suscripciones: ComunidadId_FK NULL FOREIGN KEY +Estado: String NOT NULL DEFAULT "Desconectado" 	<ul style="list-style-type: none"> +ID_PK: Int PRIMARY KEY NOT NULL UNIQUE +Nombre: String(50) NOT NULL UNIQUE +Genero: Generoid_FK NOT NULL FOREIGN KEY +Categoria: Categoriald_FK NOT NULL FOREIGN KEY +Descripcion: String(255) NULL +Desarrollador: DesarrolladorId_FK NOT NULL FOREIGN KEY +Comunidad: Comunidad_FK NOT NULL FOREIGN KEY +Precio: Int NOT NULL DEFAULT 0 +FechaLanzamiento: Date NOT NULL +Tamaño: Int NOT NULL +RequerimientosSistema: String(255) NOT NULL +DLCs: DLC_FK NULL FOREIGN KEY +Reseña: Usuariold_FK NULL FOREIGN KEY +Actualizaciones: String(255) NOT NULL 	<ul style="list-style-type: none"> +ID_PK: Int PRIMARY KEY NOT NULL UNIQUE +Nombre: String(50) NOT NULL +Descripción: String(255) NULL +Icono: Image NULL 	<ul style="list-style-type: none"> +ID_PK: Int PRIMARY KEY NOT NULL UNIQUE +Nombre: String(50) NOT NULL
Reseña	DLC	Insignia	Desarrollador
<ul style="list-style-type: none"> +Calificación: Int PRIMARY KEY NOT NULL UNIQUE +Comentario: String +Usuario: Usuariold_FK +Juego: Juegold_FK +Fecha: Date 	<ul style="list-style-type: none"> +ID_PK: Int PRIMARY KEY NOT NULL UNIQUE +Nombre: String(50) NOT NULL +Precio: Int NOT NULL DEFAULT 0 +Juego: Juegold_FK FOREIGN KEY NOT NULL UNIQUE +Tamaño: Int NOT NULL 	<ul style="list-style-type: none"> +ID_PK: Int PRIMARY KEY NOT NULL UNIQUE +Nombre: String(50) NOT NULL +Experiencia: Int NOT NULL DEFAULT 0 +Descripcion: String(255) NOT NULL +Icono: Image NULL 	<ul style="list-style-type: none"> +ID_PK: Int PRIMARY KEY NOT NULL UNIQUE +Biografia: String(255) NOT NULL +Juegos: Juegold_FK NULL FOREIGN KEY
Foro	Comunidad	Categoría	Categoría
<ul style="list-style-type: none"> +Mensajes: Mensajeld_FK FOREIGN KEY NOT NULL UNIQUE +Titulo: String(50) NOT NULL +Autor: Usuariold_FK FOREIGN KEY NOT NULL UNIQUE +ForoId: Int PRIMARY KEY NOT NULL UNIQUE +Fecha: Date NOT NULL 	<ul style="list-style-type: none"> +ID_PK: Int PRIMARY KEY NOT NULL UNIQUE +Suscriptores: Usuariold_FK FOREIGN KEY NOT NULL UNIQUE +Publicaciones: Mensajeld_FK FOREIGN KEY NOT NULL UNIQUE +Juego: Juegold_FK FOREIGN KEY NOT NULL UNIQUE 	<ul style="list-style-type: none"> +ID_PK: Int PRIMARY KEY NOT NULL UNIQUE +Nombre: String(50) NOT NULL 	<ul style="list-style-type: none"> +ID_PK: Int PRIMARY KEY NOT NULL UNIQUE +Nombre: String(50) NOT NULL
LogrosUsuario	Amigo	Mensaje	JuegoCategoría
<ul style="list-style-type: none"> +Logroid_FK: Int FOREIGN KEY NOT NULL UNIQUE +Usuariold_FK: Int FOREIGN KEY NOT NULL UNIQUE +Fecha: Date NOT NULL 	<ul style="list-style-type: none"> +Usuariold_FK: Int FOREIGN KEY NOT NULL UNIQUE +UsuarioAmigold_FK: Int FOREIGN KEY NOT NULL UNIQUE +Visibilidad: String NOT NULL DEFAULT "ALL" 	<ul style="list-style-type: none"> +ID_PK: Int PRIMARY KEY NOT NULL UNIQUE +Titulo: String(50) NULL +Contenido: String(255) NOT NULL +Autor: Usuariold_FK NOT NULL FOREIGN KEY +Fecha: Date NOT NULL 	<ul style="list-style-type: none"> +Juegold_FK: Int FOREIGN KEY NOT NULL UNIQUE +Generold_FK: Int FOREIGN KEY NOT NULL UNIQUE
InsigniasUsuario	ComunidadUsuario	JuegoUsuario	JuegoGenero
<ul style="list-style-type: none"> +Insigniad_FK: Int FOREIGN KEY NOT NULL UNIQUE +Usuariold_FK: Int FOREIGN KEY NOT NULL UNIQUE +Fecha: Date NOT NULL 	<ul style="list-style-type: none"> +Comunidad_FK: Int FOREIGN KEY NOT NULL UNIQUE +Usuariold_FK: Int FOREIGN KEY NOT NULL UNIQUE +FechaSuscripcion: Date NOT NULL 	<ul style="list-style-type: none"> +Juegold_FK: Int FOREIGN KEY NOT NULL UNIQUE +Usuariold_FK: Int FOREIGN KEY NOT NULL UNIQUE +FechaAdquisicion: Date NOT NULL 	<ul style="list-style-type: none"> +Juegold_FK: Int FOREIGN KEY NOT NULL UNIQUE +Generold_FK: Int FOREIGN KEY NOT NULL UNIQUE



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THANKS

