Progetto per Basi di Dati

Mutua Fadhla Mohamed

June 1, 2024

Contents

1	Descrizione	1						
2	Schema concettuale							
3	Schema Logico	2						
	3.1 Entità	2						
	3.2 Relazioni							

1 Descrizione

This database contains information on tolls a player needs to pay to be able to travel from one dimension to another (which is unlocked by completing a set of quests). It needs the player to have a certain amount of achivements completed, be in a guild that is not considered evil (e.g. player killers), have unmodified/achivement complying weapons. All of which is verified by an npc, and only sells them a pass if they checks are TRUE.

2 Schema concettuale

Entity 1	Relationship	Entity 2
Player (1:1)	Pay	NPC (1:1)
Player (0:1)	Complete	Quest (0:N)
Player (0:1)	Own	Player_item (1:N)
Player_item (1:N)	Legal_item	Achievement (1:N)
Player (0:N)	Belong	Guild (1:1)
NPC (1:1)	$Checks_Affiliation$	Guild (0:1)
NPC (1:1)	$Checks_Achieved$	Achievement (0:N)
Player (0:N)	Travel	Dimension (1:1)
NPC (1:1)	Travel_permit	Player (1:1)
Dimension (1:1)	Complete	Quest(1:N)

 ${\bf Table~1:~Entity\text{-}Relationship~Descriptions}$

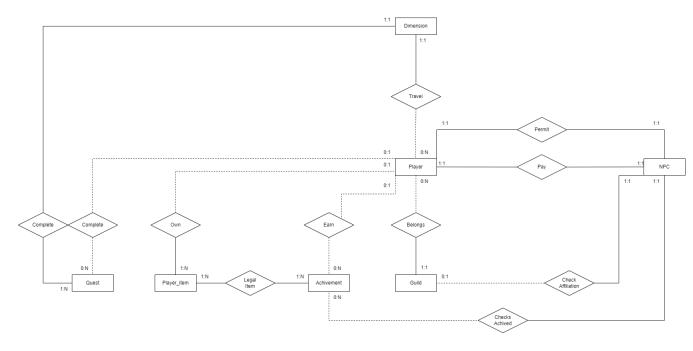


Figure 1: Schema concettuale (1)

3 Schema Logico

3.1 Entità

Entità	Descrizione	Attributi	Identificato /
Player	A user of the game	player_id, name, level, experience,	player_id
		guild_id (nullable)	
NPC	Non-player character	npc_id, name, role, alignment	npc_id
Quest	A task or mission	quest_id, name, description, reward	quest_id
Player_Item	Items owned by a player	player_item_id, player_id, item_id,	player_item_id
		quantity	
Item	Items in the game	item_id, name, type, value	item_id
Achievement	Achievements earned by players	achievement_id, name, description	achievement_id
Guild	Groups that players can join	guild_id, name, alignment	guild_id
Dimension	Different game worlds or levels	dimension_id, name, description	dimension_id
Payment	Payments made by players to NPCs	payment_id, player_id, npc_id,	payment_id
		amount, timestamp	
Completion	Record of completed quests	completion_id, player_id, quest_id,	completion_id
		completion_date	
Earn	Record of earned achievements	earn_id, player_id, achievement_id,	earn_id
		earn_date	
Travel	Records of player travels	travel_id, player_id, dimension_id,	travel_id
		permit (Boolean)	

3.2 Relazioni

Relazioni	Descrizione	Componenti	Attribu
Pay	Payment from player to NPC	Player (1:1), NPC (1:1)	payment
			timestar
Complete	Completion of quests by players	Player (0:1), Quest (0:N)	completi
			pletion_ player_i
Own	Ownership of items by players	Player (0:1), Player_Item (1:N)	player_i
			quantity
Earn	Earning of achievements by players	Player (0:1), Achievement (0:N)	earn_id
			earn_da
Belong	Membership of players in guilds	Player (0:1), Guild (1:N)	guild_id
Checks_Alignment	NPC checks alignment of guild	NPC (1:1), Guild (0:1)	npc_id,
Checks_Achievement	NPC checks player's achievements	NPC (1:1), Achievement (0:N)	npc_id ,
Checks_Illegal_items	NPC checks player's items	NPC (1:1), Player_Item (0:N)	$\operatorname{npc}_{-\operatorname{id}},$
Checks_Quest	NPC checks player's quests	NPC (1:1), Quest (0:N)	$\operatorname{npc}_{-\operatorname{id}},$
Travel	Player travels to a dimension	Player (0:N), Dimension (1:1)	travel_i
			mit (Bo
Travel_permit	NPC grants travel permits to dimensions	NPC (1:1), Dimension (1:1)	npc_id,