



BILKENT UNIVERSITY
DEPARTMENT OF COMPUTER ENGINEERING

CS 353 -Database Systems

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Wapour.Ware (Gaming Platform) **Proposal Document**

Group X

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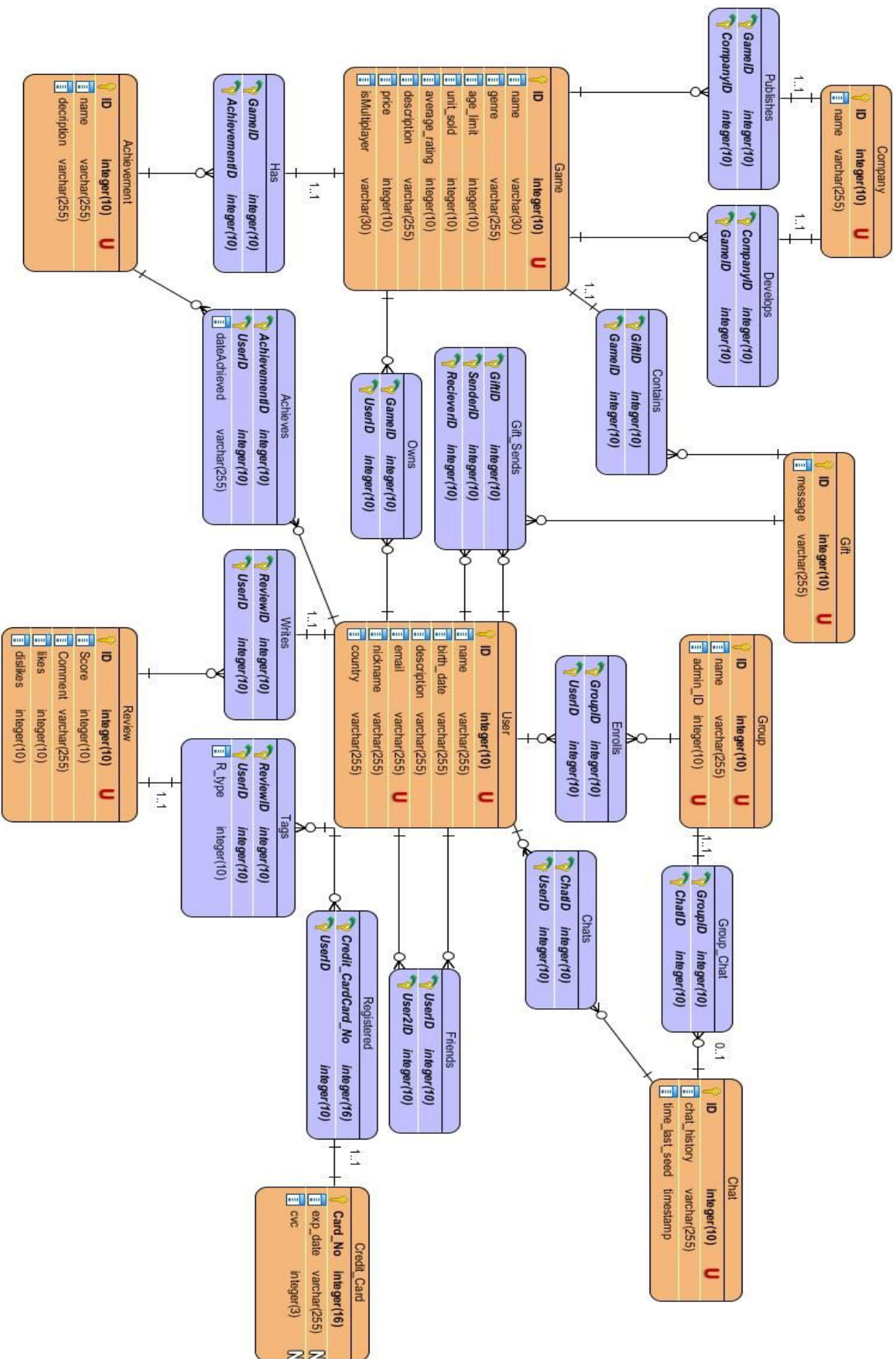
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1. Introduction

wapour.ware (W.W) is a system that integrates an online gaming platform, a market for selling game products and a social network for gamers. In this platform the players are able to buy games, play games, rate them and write reviews about them. W.W categorizes the games by genre, multiplayer availability. It also stores the games' general information such as price of the game, brief description and age limit as well as statistical data such as average rating. The system is able to sort the games by according to game data it stores. W.W also keeps track of user specific data such as their ratings, reviews and progress and achievements in the games. Additionally, it saves user data, such as their friends and the gift they send to their friends and the friends who owns the game they examine at the time. Groups of users and the members of the chatrooms they have formed are also recorded. The system will feature a web-based interface for users and administrators.

2. E/R Diagram

Notes on the diagram: This diagram created using Visual Paradigm software. Orange tables are entities and purple ones are relationship sets. If there is a triangle in the relationship this means many. If there is no triangle, just a line, that means one. So it is reverse of the slides. We specified one relations with number too so cope with misunderstandings. This is because of the visual paradigm. Another thing to mention is big red U's in columns. This U specify the attribute with unique property. Therefore, if there is a U near attribute that means that attribute is unique. Key symbol near the attribute means that attribute is primary key. The diagram can be found on the next page.



3. Functionalities

A user should be able to:

- Register an account with their personal information.
- Login using his/her email address and password.
- View the list of games they own.
- View the list of total games in the store.
- View the list of their friends.
- View the list of reviews of a game.
- Review a game they own and give a score to the game.
- Like or dislike the review of another user.
- Create and join chats.
- Form or join a “group”.
- Join the chat of a specific “group”
- Save credit card information.
- Buy a game from the store with a credit card.
- Gift a game to another account.

4. Requirements

A database is required to store all these data in an efficient and effective manner. Complex user-game and user-user relationships also promotes using of databases. Database is also enhances filtering and sorting the games. Looking for which friends own a specific game requires applying query, which a database would assist in.

A back-end framework is also required to implement a server to take requests from clients and apply queries to produce the necessary response in a timely manner.

5. Limitations

The limitations to the current is system is storing chat records. The chat messages are not stored firstly because it will require lots of space and more importantly it can introduce privacy issues.