

## Section I: Database Design

In this section, you are required to create the database structure and relationships based on the entities listed below. Ensure that you carefully analyze and model the relationships between these entities to design an efficient and logical database schema.

### Entities

1. **Content (or Show)**
2. **Director**
3. **Actor (or Cast)**
4. **Genre**
5. **Country**
6. **Rating**
7. **Content\_Format**
8. **User**
9. **Review**
10. **Subscription\_Plan**
11. **User\_Subscription**
12. **Playlist**
13. **Content\_Release**
14. **Watchlist**
15. **Content\_WatchHistory**
16. **Tag**
17. **Content\_Accessibility**
18. **Content\_Availability**
19. **Payment\_Method**
20. **Transaction**

### Database Requirements

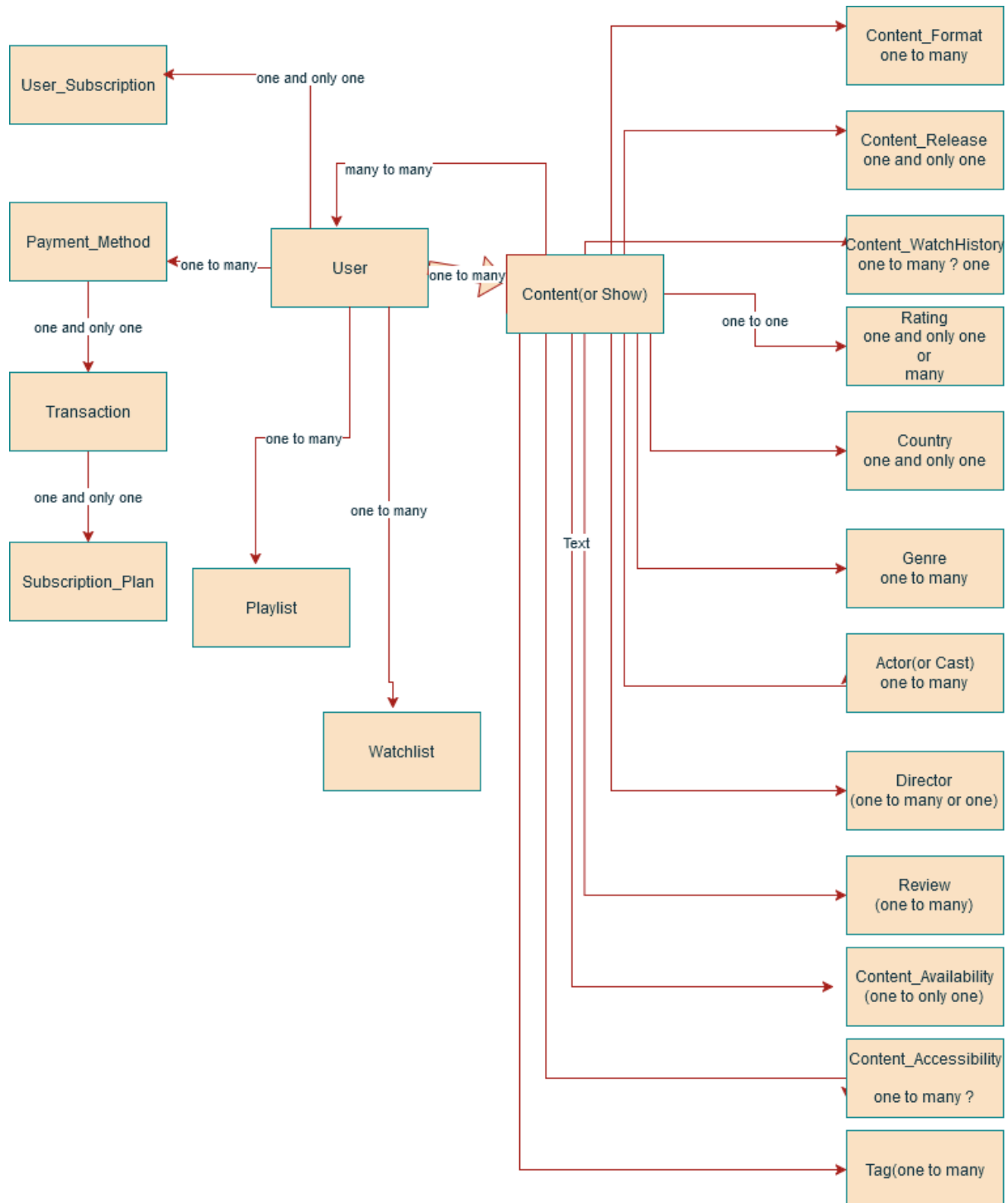
1. Create a **PDF file** named **Requirements.pdf** that outlines the necessary database requirements. This file should describe the relationships between the entities listed above, including all relationship types (e.g., many-to-many, one-to-one, etc.) discussed in class.
2. Once completed, **upload the PDF** to the **files** directory of this repository.

### Entity Relationship Diagram (ERD)

1. Use [Draw.io](https://draw.io) to create an Entity Relationship Diagram (ERD) based on the database requirements from Section I.
2. The ERD should:

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- Include all the entity sets corresponding to the entities listed above.
  - Show the relationships, cardinalities, and primary/foreign keys (PKs and FKs) for each entity.
3. Export the ERD as a **PNG file** named **ERD.png**.
  4. **Upload the PNG file** to the **files** directory of this repository.



Content-> Content Release-> one and only one  
Content-> Content\_watchHistory -> one to many ? one  
Content -> Rating-> one and only one? many

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Date: Feb 11

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Content-> country-> one and only

Content-> Genre -> one and many

content-> Actor-> one to many

content-> Director one to one

Content-> Review-> one to many

Content-> Content\_Availabilty-> one and only one?

Content->Content\_Accessability-> one to many?

Content-> Tag one to many

User -> Content -> one to many

User -> playlist -> one to many

User -> Watchlist -> one to many

user-> payment\_method-> one to many

User-> User\_Subscription-> one and only one?