**Freelancer Marketplace**

**Abstract**

In the freelancer marketplace,Freelancers showcase their skills by applying for Projects that are posted by clients. Clients describe their projects , based on the requirement of client, freelancers propose how they will complete them

Payments are made by clients to Freelancers upon completion of Projects,reviews are given by Clients to Freelancers after completion of Projects

Skills and categories are used to categorise Projects and Freelancers,Messaging facilitates communication between Freelancers and clients and the Portfolio showcases the work of Freelancers

* **Entities and its Attributes:**

1. **Entity->Freelancer**

**Attributes of Freelancer->**

1. **freelancer\_id(unique identifier)**
2. **Name**
3. **Email**
4. **Skills**
5. **Portfolio\_id**

**B. Entity->Client**

**Attributes of Client->**

1. **Client\_id(unique identifier)**
2. **Name**
3. **Email**

**C**.  **Entity->Project**

**Attributes of Project->**

1. **Project\_id(unique identifier)**
2. **Title**
3. **Description**
4. **Deadline**
5. **Category\_id**
6. **Client\_id**

**D. Entity->Proposal**

**Attributes of Proposal->**

1. **proposal\_id(unique identifier)**
2. **Bid\_amount**
3. **Freelancer\_id**
4. **Project\_id**
5. **Status**

**E. Entity->Payment**

**Attributes of Payment->**

1. **payment\_id(unique identifier)**
2. **Amount**
3. **Date**
4. **Status**
5. **Client\_id**
6. **Freelancer\_id**

**F. Entity->Review**

**Attributes of Review->**

1. **review\_id(unique identifier)**
2. **Rating**
3. **Review\_text**
4. **Client\_id**
5. **Freelancer\_id**

**G. Entity->skill**

**Attributes of skill->**

1. **skill\_id(unique identifier)**
2. **Name**

**H. Entity->category**

**Attributes of category->**

1. **category\_id(unique identifier)**
2. **Name**

**I Entity->Messaging**

**Attributes of Messaging->**

1. **message\_id(unique identifier)**
2. **Sender\_id**
3. **Receiver\_id**
4. **Message**

**J. Entity->Portofolio**

**Attributes of portofolio->**

1. **portofolio\_id(unique identifier)**
2. **Title**
3. **Description**
4. **Url**

**Entity relationships**

1. **Freelancer-Client:Many-to-Many**

**->A Freelancer can work with Many Clients and also a Client can hire Many Freelancers.**

1. **Freelancer-Project:One-to-Many**

**->A Freelancer can submit proposals for Many Projects but each Project typically involves only one Freelancer.**

1. **Client-Project:One-to-MAny**

**->AClient can post Many Projects but each Project typically belongs to only one Client**

1. **Freelancer-Proposal:One-to-Many**

**->A Freelancer can submit Many Proposals for different Projects, but each Proposal is made by only one Freelancer for a specific Project.**

1. **Client-Payment:One-to-Many**

**->A Client can Make Many Payments to different Freelancers for various Project**

**But each Payment is made by Only one Client to one Freelancer**

1. **Client-Review:One-to-Many**

**->A Client can give Many Reviews to different Freelancers for various Project but**

**each Review is given by only one client to one Freelancer**

1. **Freelancer-Skill:Many-to-Many**

**->A Freelancer can have Many Skills and each Skill can be possessed by Many Freelancers.**

1. **Project-Category:Many-to-One**

**->Many Projects can belong to one Category but each Project can only be associated with one Category**

1. **Client-Messaging-Freelancer:Many-to-Many**

**->MAny Messages can be exchanged between Many CLients and Many Freelancers.**

1. **Freelancer-Portfolio:One-to-One**

**->Each Freelancer has One Portfo;io showcasing their work**