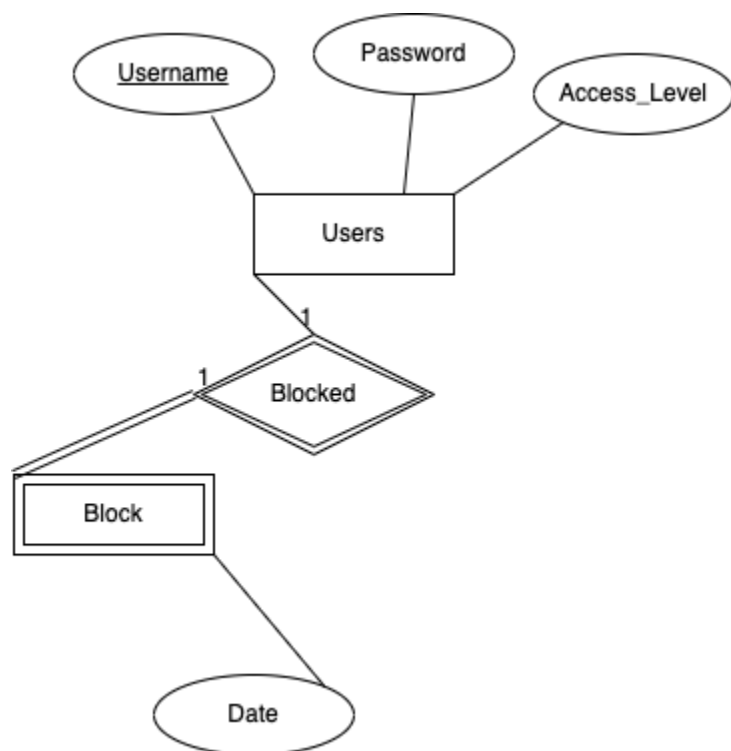In this schema, the entity Art-object has the key attribute Id_num. Other attributes are Year, Title, Description, Country, Epoch, and Style. Painting, Sculpture/Statue, and Other are the subclasses of the Art_object with a total joint. Similarly, Permanent Collection and Borrowed Collection are the subclasses of art-object with a total joint. For subclass Painting, we have two attributes paint_type and drawn_on. Sculpture/Statue has three attributes: material, height, and weight. The subclass Other has one attribute which is Type. In the Permanent Collection subclass, there are two attributes Date and Status while the Borrowed Collection subclass has two attributes, Date_borrow and Date_return. We decided that all Art-object is either borrowed or permanent, and is either Painting or Sculpture/Statue or Other.

For "Artist", it is a strong entity with the key attribute "Name." Other attributes for Artist include Date_born, Date_die, which represents the birth and death of the artist in question, if it is applicable. The country attribute represents where the artist is from. The other attributes for artist include Description, main_style and Epoch. We assumed all art-objects must have an artist that created them, however not all artists need to have an art-object. So, for the created by relation, we have N:1 relation, with total participation for the Art-object side, partial for the Artist side.

For "Exhibition", we have it as strong entity, with Name as its key attribute. It has start date and end date as attribute. All exhibition must have art objects, so all must be participate in relation of exhibited in. We assumed not all art object participate in exhibition, and they are not fixed in one exhibition, so is m:n relation, with total participation for Exhibition side.

For collection, we also have Name as its key attribute, along with type, description and current phone number as attributes. We assumed all art object belongs to some collection, so is N:1 relation, with total participation for art object.

For users, we have user as the only entity, and username should be unique here, with the access level from end user, data entry and admin level. We assume that higher level can use all functions of lower level. Block is the user being blocked, is a weak entity, and depends on the username. The date is to show the block date.