

# CS 166: Project Phase 2 Requirements

February 10, 2016

## 1 Introduction

In this phase you are given an ER-Diagram (a possible solution of phase 1) and you are asked to convert it into the ANSI compliant relational model. This ER model has some slight changes from the model given in Phase 1, and it is designed for a simple but generic model for implementation and possible extension on features. So please pay special attention to the given ER model and attributions in this document, instead of sticking to your solution submitted for Phase 1.

The ANSI Relational Model is described in Chapter 3 of your textbook. Please consider any required integrity constraints over relations. In this phase you are not allowed to do any assumptions since you are asked to make a precise translation of the ER model into the relational model. This means you should specify necessary constraint keywords like NOT NULL, UNIQUE, PRIMARY KEY, FOREIGN KEY REFERENCES, etc.

The due date for this phase is 11:59pm, **Wednesday, February 17 2016**. Please submit your relational model as a single re-creatable SQL script file containing CREATE TABLE statements with required constraints.

## 2 ER-Diagram

The ER-Diagram for our Messaging application is showed in Figure 1. For simplicity, we omit all attributions of entities. You can find the full list of attributions in the next section.

## 3 Full Attributes List

The following table lists table-specific attributes of all entities. Primary keys are shown in bold. Note that tables could have additional attributes

due to foreign key constraints. The third column show an attribute-specific constraints, however this is not an exhaustive list. Additional constraints might be applied due to relationships between tables.

Attribute name	Attribute domain	Additional constraints
User		
phoneNum	char(13)	unique, not null
<b>login</b>	char(50)	unique
password	char(50)	not null
status	char(140)	
User list		
list_type	char(10)	not null
Message		
<b>id</b>	int	
text	char(140)	not null
timestamp	timestamp	not null
status	char(30)	not null
Chat		
<b>id</b>	int	
chat_type	char(10)	not null

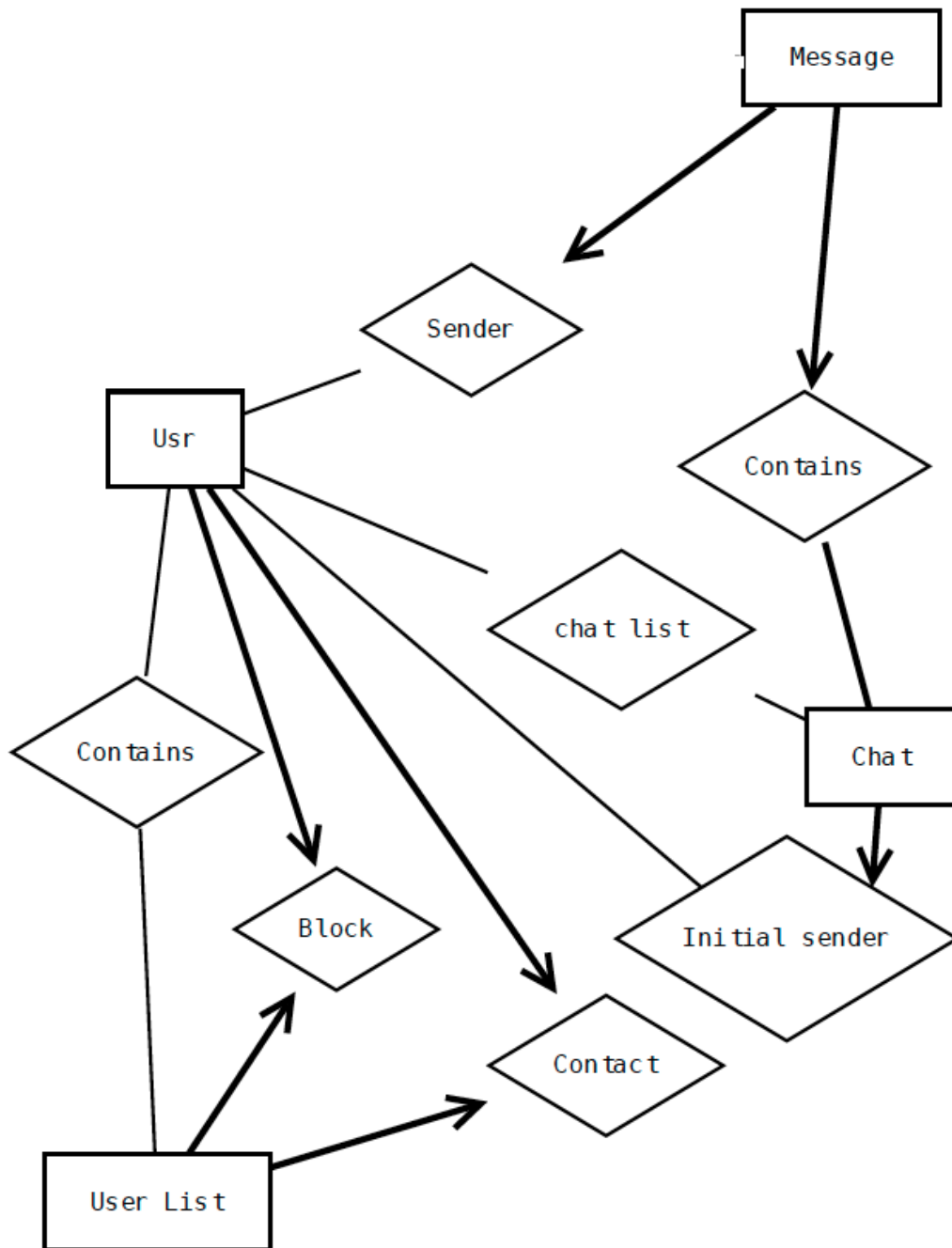


Figure 1: ER-diagram for Messaging application