# Relational Schema

SessionUser(<u>ID</u>, DisplayName, SessionID)

SessionRoom(<u>ID</u>, OwnerID, SessionPassword, Timestamp)

Message(<u>ID</u>, <u>SessionID</u>, MsgContents, PosterID, ReplyTo, Likes, Approved)

BugReport(<u>ID</u>, Category, BugText, Status, Timestamp)

PanicButton(<u>ID</u>, PanicType, Desc)

PanicResponse(<u>ID</u>, PanicType, Panicker, SessionRoom, LogTime)

QuizType(<u>ID</u>, Abbrev, Desc)

Quiz(<u>ID</u>, QuizType, SessionRoom)

QuizResponse(<u>ID</u>, Quiz, Poster, Timestamp)

QuizResponseMultipleChoice(<u>ID</u>, ...), QuizResponseFreeResponse(<u>ID</u>, ...),
QuizResponseCheckBox(<u>ID</u>, ...), etc...

## Foreign Keys:

UserSession(SessionID) -> SessionRoom(ID)

SessionRoom(OwnerID) -> SessionUser(ID)

Message(SessionID) -> SessionRoom(ID)

Message(PosterID) -> UserSession(ID)

Message(ReplyTo) -> Message(ID)

PanicResponse(PanicType)->PanicButton(ID)

PanicResponse(Panicker)->SessionUser(ID)

PanicResponse(SessionRoom)->SessionRoom(ID)

Quiz(QuizType)->QuizType(ID)

Quiz(SessionRoom)->SessionRoom(ID)

QuizResponse(Quiz)->Quiz(ID)

QuizResponse(Poster)->SessionUser(ID)

QuizResponseMultipleChoice et al. (ID)->QuizResponse(ID)

**Tips on implementation:**

A QuizType determines what kind of responses are acceptable. It has an abbreviation. For example, multiple choice could be 'MPC' or something. You decide. It also has a description of how that type of quiz works.

A Quiz is what everyone is responding to, so it has a QuizType, a session, and an ID.

QuizResponse has a quiz the response is being given to, it has a timestamp for when the response was made, and it has the user who posted it.

QuizResponseMultipleChoice, FreeResponse, CheckBox, etc... These are a child table of the QuizResponse table. They have an ID that is a foreign key back to the same ID on the Quiz table. They have additional columns depending on their quiz type. For example, MultipleChoice would want a single letter, FreeResponse would allow an NVARCHAR, etc...