

# Database Planning Group 9

## 1 Database Relations

Variable Name	Variable Type	Variable Description	Variable Checks
compID	SERIAL	The unique ID for the company	–
compName	VARCHAR(100)	The name for the company	NOT NULL, UNIQUE
compTicker	VARCHAR(100)	The rating due to public perception	NOT NULL, UNIQUE
compRating	INTEGER	The ranking within the database	NOT NULL, between 0, 100

Table 1: Company Table

primary = compID

Variable Name	Variable Type	Variable Description	Variable Checks
userID	SERIAL	The unique ID for the user	–
userName	VARCHAR(100)	The name for the user	NOT NULL, UNIQUE
userEmail	VARCHAR(100)	The email address of the user	NOT NULL, UNIQUE
userPasswordHash	VARCHAR(100)	The user's password hashed	NOT NULL

Table 2: User Table

primary = userID

Variable Name	Variable Type	Variable Description	Variable Checks
catName	VARCHAR(100)	The name for the category	NOT NULL

Table 3: Category Table

primary = catName

Variable Name	Variable Type	Variable Description	Variable Checks
newsID	SERIAL	The unique ID for the news article	–
newsDate	TIMESTAMP	The time the news was published	–
newsTitle	VARCHAR(1000)	The title for the news	–
newsLink	VARCHAR(2000)	The link for the news article	UNIQUE
newsComp	VARCHAR(100)	The company the news is about	–
newsCat	VARCHAR(100)	The news category	–
newsSentiment	INTEGER	The news sentiment analysis	–

Table 4: News Table

primary = newsID  
foreign = newsComp  
foreign = newsCat

Variable Name	Variable Type	Variable Description	Variable Checks
compID	INTEGER	The ID for the company	–
stockDay	TIMESTAMP	The day for the company's stock	–
stockOpen	FLOAT	The open price on the day	Bigger than 0
stockClose	FLOAT	The link for the news article	Bigger than 0
stockDiffDay	FLOAT	The difference between the start and end	–

Table 5: Stock Table

primary = compID, stockDay  
foreign = compID

Variable Name	Variable Type	Variable Description	Variable Checks
userID	INTEGER	The unique ID for the user	–
catName	VARCHAR(100)	The name for the category	–

Table 6: User Category Table

primary = userID, categID  
foreign = userID  
foreign = catName

Variable Name	Variable Type	Variable Description	Variable Checks
compID	INTEGER	The unique ID for the company	–
catName	VARCHAR(100)	The name for the category	–

Table 7: Company Category Table

primary = compID, catName  
foreign = compID  
foreign = catName

Variable Name	Variable Type	Variable Description	Variable Checks
userID	INTEGER	The unique ID for the user	–
compID	INTEGER	The unique ID for the company	–

Table 8: User Followed Companies

primary = userID, compID  
foreign = userID  
foreign = compID