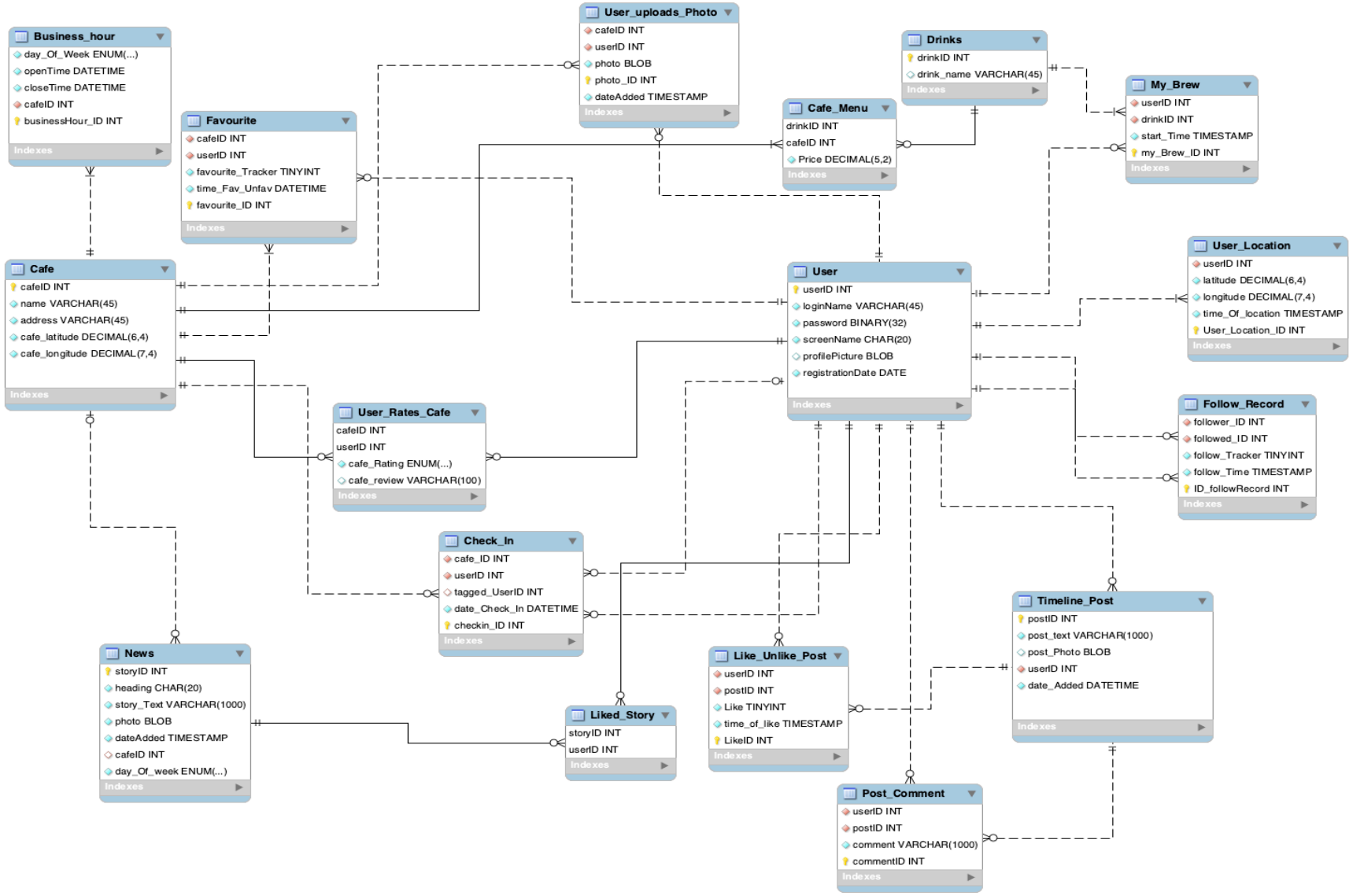
Business_hour
day_Of_Week ENUM(...)
openTime DATETIME
closeTime DATETIME
cafeID INT
businessHour_ID INT
Indexes
User_uploads_Photo
cafeID INT
userID INT
photo BLOB
photo_ID INT
dateAdded TIMESTAMP
Indexes
Drinks
drinkID INT
drink_name VARCHAR(45)
Indexes
My_Brew
userID INT
drinkID INT
start_Time TIMESTAMP
my_Brew_ID INT
Indexes
Favourite
cafeID INT
userID INT
favourite_Tracker TINYINT
time_Fav_Unfav DATETIME
favourite_ID INT
Indexes
Cafe_Menu
drinkID INT
cafeID INT
Price DECIMAL(5,2)
Indexes
Cafe
cafeID INT
name VARCHAR(45)
address VARCHAR(45)
cafe_latitude DECIMAL(6,4)
cafe_longitude DECIMAL(7,4)
Indexes
User
userID INT
loginName VARCHAR(45)
password BINARY(32)
screenName CHAR(20)
profilePicture BLOB
registrationDate DATE
Indexes
User_Location
userID INT
latitude DECIMAL(6,4)
longitude DECIMAL(7,4)
time_Of_location TIMESTAMP
User_Location_ID INT
Indexes
User_Rates_Cafe
cafeID INT
userID INT
cafe_Rating ENUM(...)
cafe_review VARCHAR(100)
Indexes
Follow_Record
follower_ID INT
followed_ID INT
follow_Tracker TINYINT
follow_Time TIMESTAMP
ID_followRecord INT
Indexes
Check_In
cafe_ID INT
userID INT
tagged_UserID INT
date_Check_In DATETIME
checkin_ID INT
Indexes
Timeline_Post
postID INT
post_text VARCHAR(1000)
post_Photo BLOB
userID INT
date_Added DATETIME
Indexes
News
storyID INT
heading CHAR(20)
story_Text VARCHAR(1000)
photo BLOB
dateAdded TIMESTAMP
cafeID INT
day_Of_week ENUM(...)
Indexes
Liked_Story
storyID INT
userID INT
Indexes
Like_Unlike_Post
userID INT
postID INT
Like TINYINT
time_of_like TIMESTAMP
LikeID INT
Indexes
Post_Comment
userID INT
postID INT
comment VARCHAR(1000)
commentID INT
Indexes

INFO90002 – Data Dictionary – The 'COFFEE CLUB' Database

List of entities

Entities	Entity type	Primary Key	# Attributes
CAFÉ	independent	cafe_id	5
USER	independent	user_id	6
BUSINESS_HOUR	dependent	businessHour_ID	5
DRINK	independent	drink_id	2
CAFÉ_MENU	dependent	café_id, drink_id	3
USER_RATES_CAFE	dependent	café_id, user_id	4
USER_UPLOADS_PHOTO	independent	photo_id	5
MY_BREW	dependent	my_Brew_ID	4
USER_LOCATION	dependent	user_Location_ID	5
FAVOURITE	dependent	favourite_ID	5
FOLLOW_RECORD	dependent	ID_followRecord	5
CHECK_IN	dependent	checkin_ID	5
NEWS	independent	story_id	7
LIKED_STORY	dependent	user_id, story_id	2

TIMELINE_POST	independent	post_id	5
LIKE_UNLIKE_POST	dependent	likeID	5
POST_COMMENT	independent	comment_id	4

Entity 'CAFÉ'

Description

The "Coffee Club" app's main entity is the *Café* entity, which comprises of the details of every café from Australia, that is included in our system database.

Attributes

Key	Attribute	Data Type	Not Null	Unique	Description
PK	cafe_id	INT	Yes	Yes	This is the unique integer, by which every café is uniquely defined in our system. For eg., two cafes with same name will be differentiated by the café_ID.
	name	VARCHAR(64)	Yes	No	The name of the café itself.
	address	VARCHAR(255)	Yes	Yes	Here, we store the address of a café, which helps a user locate the café manually. Every café will have it's own

					unique address.
	cafe_latitude	DECIMAL(6,4)	Yes	No	Stores the first argument of geographical location of the café, i.e., latitude, which takes value between -90 to +90 (upto 4 decimal places).
	cafe_longitude	DECIMAL(7,4)	Yes	No	Stores the second argument of the geographical location of the café, i.e., longitude, which takes value between -180 to +180 (upto 4 decimal places).

Entity 'USER'

Description

The 'COFFEE CLUB' app has a 'User' entity, which defines all the users/customers who have signed up to the app, and thus are a member of the same. A *User* uses the application to browse the cafes and its menu in the system. *User* can also perform various actions in the app, making it more accessible as a social network platfrom. For eg., A *User* may like a post, select a favourite drink, tag others, etc.

Attributes

Key	Attribute	Data Type	Not Null	Unique	Description
PK	user_ID	INTEGER	YES	YES	This is the primary key of User, which gets auto-incremented, as generated by the DBMS. This key will remain unique throughout the lifetime of the database.
	loginName	VARCHAR(45)	YES	YES	This is the email address of a particular user, which is unique for every user.
	screenName	CHAR(20)	YES	NO	This is user's short screen name, entered at the time of profile creation. It's the name displayed to other users, and can change during the lifetime of the user profile.
	password	CHAR(64)	YES	NO	This is user profile password, and will be given during profile creation to prevent privacy breach. This can change during the lifetime of the user profile.
	profilePicture	BLOB	NO	NO	A user can put an optional profile picture in his display profile, and can anytime remove it or change it.
	registrationDate	DATETIME	YES	NO	This is user's registration date with the café application. This will remain same during user profile lifetime.

Entity 'NEWS'

Description

The coffee club app has a 'news' page where users can browse system-generated stories about significant events such as sales or parties. A story consists of a heading, a short body of text and a photo. Stories can be browsed either in date order or by café. Each user is allowed to like news stories.

Attributes:

Key	Attribute	Data Type	Not Null	Unique	Description
PK	story_ID	INTEGER	YES	YES	Primary Key which is used to uniquely recognize stories which are system generated; This integer key gets auto-incremented.
FK	cafeID	INTEGER	NO	YES	It lets us know if a news story is about a particular café or not. If a story is about a café, the café ID will be given; else it will have a NULL value.
	heading	CHAR(32)	YES	NO	Title of the story which is located above the body of the story.
	story_text	VARCHAR(1000)	YES	NO	It stores the content of the story which can be upto a maximum of 1000 characters. The text gives information about a specific event like a sale or a party, which

					may be associated to a particular café.
	photo	BLOB	YES	NO	Single picture uploaded by the writer along with the heading and body of the story.
	dateAdded	TIMESTAMP	YES	NO	Signifies the date and time, on which a particular story was published on the news page.
	Day_Of_Week	ENUM(…)	YES	NO	Shows the day of week on which the particular story was published.

WORK BREAKDOWN

The project of creating a physical data model (ER Diagram) for the 'Coffee Club' App was assigned to be performed in a group of 3. After a few days the assignment was released, students with ID's 1041953, 1036672 and 1060237 decided to form a group and finally started with the assignment. It took a day or two for each of us to understand the case study in depth, and be aware of what is being asked for in the assignment. After analyzing each of our understandings of the case study, we thought of approaching the project in a hypothetical fashion, where we assumed that Cafe, User and News are going to be the main independent entities. So each of us took one of these entities, and started working on the project. The work got evenly distributed in this manner, and it gave us an independence to form our own tables with respect to the entity each one us had picked. During the entire process of working on this assignment, we used to hold meetings whenever the need popped up, and used to resolve the issues that we came across while performing each of our tasks. Finally we conglomerated our tasks together, and refined the database model by making changes where required. Any left out relationships and cardinalities, that we encountered after putting together our tables, were sorted by heavy, but fruitful discussions. There's been an equal distribution of work between the 3 students, and a list of breakdown has been given below :

StudentID 1041953 – Café, Business_Hour, Drink, Café_Menu, User_Rates_Cafe, User_Uploads_Photo

StudentID 1060237 - User, My_Brew, Timeline_Post, Post_Comment, Like_Unlike_Post, Follow_Record

StudentID 1036672 – News, User_Location, Favourite, Check_In, Liked_Story