**Name : Dessert Planner**

**Brainstorming:**

* UserName
* Password
* Email
* DOB
* GroceryList
* Ingredients
* Recipes
* IsPublic
* Occasions

**Table Ideas:**

* **Dp\_user\_info —** user info
* **dp\_auth\_table** : users credentials
* Create\_Recipe\_table : all recipes of users
* **Instructions\_table** : instructions of recipes
* **Ingredient\_table** : contains all kind of ingredients
* **grocery\_List table** : ingredients required
* **occasions\_table** : contains occasions
* **Recipe\_ingredient\_table**
* **Ingredients\_grocery\_table**
* **occasion\_recipe\_table**

**Relationship:**

**One to One:**

User Table —- Auth Table , one user will have only one set of credentials

Instruction\_table— create\_recipe

User table —-- Grocery Table — One user can have one grocery list

**One to Many:**

User table —--Recipe Table — One user can create many recipes

Grocery Table — Ingredient Table —-one list can have many ingredients

User table — Occasion table —one user can have many occasions

Create\_recipe – ingredients table –One recipe can have many ingredients

Create\_recipe\_table —- instruction table Each Recipe can have many instructions

**Many to Many**:

create\_Recipe-----Ingredients –one Recipe can have many ingredients and many recipes can use same ingredients

Occasion - Recipe one recipe can be created in many occasions, one occasion can have many recipe

**Columns**  data type used

User table: user info

**Dp\_user\_info**

* dp\_user\_id integer
* firstname VARCHAR
* lastname VARCHAR
* Dob VARCHAR

Auth table : users credentials

**dp\_auth\_table**

* dp\_auth\_id INTEGER
* Email VARCHAR
* password\_hash VARCHAR
* dp\_user\_id

Create\_Recipe\_table : all recipes of users

* dp\_recipe\_id INTEGER
* Recipe\_name VARCHAR
* Dp\_user\_id INTEGER
* isPublic BOOLEAN

**Instructions\_table** : instructions of recipe

* Dp\_instruction\_id INTEGER
* Instructions VARCHAR
* Dp\_recipe\_id INTEGER

**Ingredient\_table** : contains all kind of ingredients

* Dp\_ingredients\_id INTEGER
* Ingredient\_name VARCHAR

**grocery\_List table** : ingredients required

* Dp\_grocery\_id INTEGER
* Grocery\_name VARCHAR
* Dp\_user\_id INTEGER

**occasions\_table** : contains occasions

* Dp\_occassion\_id INTEGER
* Occasion VARCHAR

**Recipe\_ingredient\_table**

* Dp\_recipe\_ingredients\_id INTEGER
* Dp\_recipe\_id INTEGER
* Dp\_ingredients\_id INTEGER

**ingredients\_grocery\_table**

* Dp\_ingredients\_grocery\_id INTEGER
* Dp\_grocery\_id INTEGER
* Dp\_ingredients\_id INTEGER

**Occassion\_recipe\_table**

* Occassion\_recipe\_id INTEGER
* Dp\_recipe\_id INTEGER
* Dp\_occassion\_id INTEGER

**SQL statements :**

CREATE TABLE "dp\_user\_info" (

"dp\_user\_id" serial NOT NULL,

"firstname" varchar(255) NOT NULL,

"lastname" varchar(255) NOT NULL,

"dob" varchar(255) NOT NULL,

CONSTRAINT "dp\_user\_info\_pk" PRIMARY KEY ("dp\_user\_id")

) WITH (

OIDS=FALSE

);

CREATE TABLE "dp\_auth" (

"dp\_auth\_id" serial NOT NULL,

"email" varchar(255) NOT NULL,

"password\_hash" varchar(1000) NOT NULL,

"dp\_user\_id" integer NOT NULL,

CONSTRAINT "dp\_auth\_pk" PRIMARY KEY ("dp\_auth\_id")

) WITH (

OIDS=FALSE

);

CREATE TABLE "create\_recipe\_table" (

"dp\_recipe\_id" serial NOT NULL,

"recipe\_name" varchar(500) NOT NULL,

"dp\_user\_id" integer NOT NULL,

"isPublic" BOOLEAN NOT NULL,

CONSTRAINT "create\_recipe\_table\_pk" PRIMARY KEY ("dp\_recipe\_id")

) WITH (

OIDS=FALSE

);

CREATE TABLE "instructions\_table" (

"dp\_instructions\_id" serial NOT NULL,

"instructions" VARCHAR(1000) NOT NULL,

"dp\_recipe\_id" integer NOT NULL,

CONSTRAINT "instructions\_table\_pk" PRIMARY KEY ("dp\_instructions\_id")

) WITH (

OIDS=FALSE

);

CREATE TABLE "ingredients\_table" (

"dp\_ingredients\_id" serial NOT NULL,

"ingridient\_name" varchar(500) NOT NULL,

CONSTRAINT "ingredients\_table\_pk" PRIMARY KEY ("dp\_ingredients\_id")

) WITH (

OIDS=FALSE

);

CREATE TABLE "grocery\_list\_table" (

"dp\_grocery\_id" serial NOT NULL,

"grocery\_name" varchar(255) NOT NULL,

"dp\_user\_id" integer NOT NULL,

CONSTRAINT "grocery\_list\_table\_pk" PRIMARY KEY ("dp\_grocery\_id")

) WITH (

OIDS=FALSE

);

CREATE TABLE "Occassions\_table" (

"dp\_occassion\_id" serial NOT NULL,

"ocassion" varchar(255) NOT NULL,

CONSTRAINT "Occassions\_table\_pk" PRIMARY KEY ("dp\_occassion\_id")

) WITH (

OIDS=FALSE

);

CREATE TABLE "recipe\_ingredients\_table" (

"dp\_recipe\_ingredients\_id" serial NOT NULL,

"dp\_recipe\_id" integer NOT NULL,

"dp\_ingredients\_id" integer NOT NULL,

CONSTRAINT "recipe\_ingredients\_table\_pk" PRIMARY KEY ("dp\_recipe\_ingredients\_id")

) WITH (

OIDS=FALSE

);

CREATE TABLE "ingredients\_grocery\_table" (

"dp\_ingredients\_grocery\_id" serial NOT NULL,

"dp\_grocery\_id" integer NOT NULL,

"dp\_ingredients\_id" integer NOT NULL,

CONSTRAINT "ingredients\_grocery\_table\_pk" PRIMARY KEY ("dp\_ingredients\_grocery\_id")

) WITH (

OIDS=FALSE

);

CREATE TABLE "occassion\_recipe\_table" (

"occassion\_recipe\_id" serial NOT NULL,

"dp\_recipe\_id" integer NOT NULL,

"dp\_occassion\_id" integer NOT NULL,

CONSTRAINT "occassion\_recipe\_table\_pk" PRIMARY KEY ("occassion\_recipe\_id")

) WITH (

OIDS=FALSE

);

ALTER TABLE "dp\_auth" ADD CONSTRAINT "dp\_auth\_fk0" FOREIGN KEY ("dp\_user\_id") REFERENCES "dp\_user\_info"("dp\_user\_id");

ALTER TABLE "create\_recipe\_table" ADD CONSTRAINT "create\_recipe\_table\_fk0" FOREIGN KEY ("dp\_user\_id") REFERENCES "dp\_user\_info"("dp\_user\_id");

ALTER TABLE "instructions\_table" ADD CONSTRAINT "instructions\_table\_fk0" FOREIGN KEY ("dp\_recipe\_id") REFERENCES "create\_recipe\_table"("dp\_recipe\_id");

ALTER TABLE "grocery\_list\_table" ADD CONSTRAINT "grocery\_list\_table\_fk0" FOREIGN KEY ("dp\_user\_id") REFERENCES "dp\_user\_info"("dp\_user\_id");

ALTER TABLE "recipe\_ingredients\_table" ADD CONSTRAINT "recipe\_ingredients\_table\_fk0" FOREIGN KEY ("dp\_recipe\_id") REFERENCES "create\_recipe\_table"("dp\_recipe\_id");

ALTER TABLE "recipe\_ingredients\_table" ADD CONSTRAINT "recipe\_ingredients\_table\_fk1" FOREIGN KEY ("dp\_ingredients\_id") REFERENCES "ingredients\_table"("dp\_ingredients\_id");

ALTER TABLE "ingredients\_grocery\_table" ADD CONSTRAINT "ingredients\_grocery\_table\_fk0" FOREIGN KEY ("dp\_grocery\_id") REFERENCES "grocery\_list\_table"("dp\_grocery\_id");

ALTER TABLE "ingredients\_grocery\_table" ADD CONSTRAINT "ingredients\_grocery\_table\_fk1" FOREIGN KEY ("dp\_ingredients\_id") REFERENCES "ingredients\_table"("dp\_ingredients\_id");

ALTER TABLE "occassion\_recipe\_table" ADD CONSTRAINT "occassion\_recipe\_table\_fk0" FOREIGN KEY ("dp\_recipe\_id") REFERENCES "create\_recipe\_table"("dp\_recipe\_id");

ALTER TABLE "occassion\_recipe\_table" ADD CONSTRAINT "occassion\_recipe\_table\_fk1" FOREIGN KEY ("dp\_occassion\_id") REFERENCES "Occassions\_table"("dp\_occassion\_id");

INSERT STATEMENTS:

INSERT INTO dp\_user\_info (firstname,lastname,dob) VALUES ('Bob','rob','01/01/1940'),('Sam','Ransom','01/05/1950'),('Tom','rob','01/07/1980')

INSERT INTO dp\_auth(email,password\_hash,dp\_user\_id) VALUES ('bobrob@gmail.com','sgdfdjsgfyu443',1),('samransom@gmail.com','sgdfdjsgdfdsfyu443',2),('tomrob@gmail.com','sfdtryu443',3)

INSERT INTO create\_recipe\_table (recipe\_name,dp\_user\_id, isPublic) VALUES('TORAMASU Cake',1,false)

INSERT INTO instructions\_table (instructions, dp\_recipe\_id) VALUES ('Bake the cake',1)

Getting error Query failed because of: error: insert or update on table "instructions\_table" violates foreign key constraint "instructions\_table\_fk0"