

AAiT- ITSC

Software Engineering 5th year

Distributed Object Database

Assignment 1

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ATE/ 8192/06

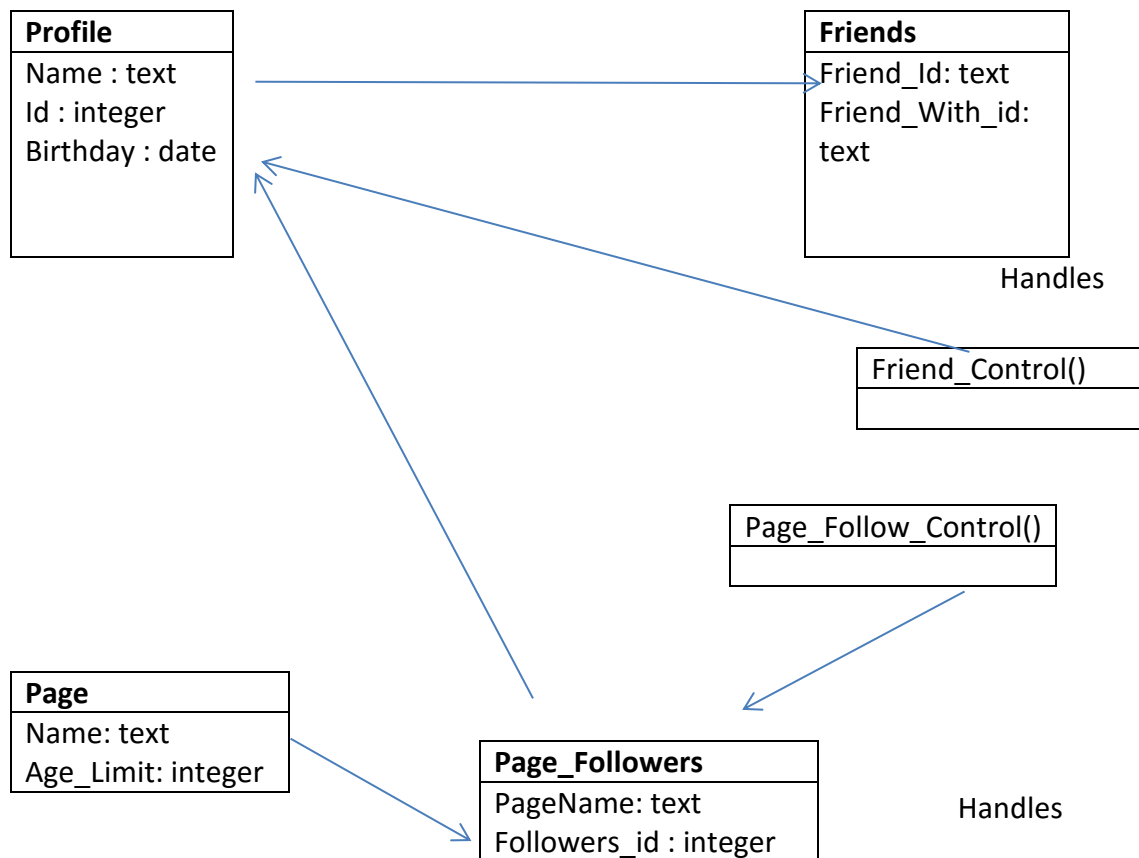
Overview

This database system scans for a proper friendship created with in a social media. This database handles improper relations that can be created through friend acceptance after a user has sent a request. This will help avoid sex predators causing insecurity among social media users. This can be handled by checking an account owner's age to whoever they're requesting to. This can be handled through other programming methods, but creates a solidified security when the database is secured since creation. This also helps users get an age appropriate page to follow, by including the page age limit and the user's actual age.

The plan is to simulate a small social media database to help understand how this database system functions. This will include age comparison and notification to the user or the page admin.

Object Model

DBName : Safe Zone



PostgreSQL Schema

```
CREATE TABLE profile(
```

```
  Name text,
```

```
  Id integer,
```

```
  BDay date,
```

```
)
```

```
CREATE TABLE friends(
```

```
  Friend_id text,
```

```
  Friend_with_id text,
```

```
)
```

```
CREATE TABLE page(
```

```
  Name text,
```

```
  Age_Limit integer,
```

```
)
```

```
CREATE TABLE page_followers(
```

```
  pageName text,
```

```
  follower_id integer,
```

```
)
```

```
CREATE OR REPLACE FUNCTION friendControl() RETURNS trigger AS $friend_Handle$
```

```
  BEGIN
```

```
    IF NEW.BDay – current_timestamp < 18 THEN
```

```
      RAISE EXCPETION 'Age not allowed';
```

```
    END IF;
```

```
END;
```

```
$Friend_Handle$ LANGUAGE plsql;
```

```
CREATE TRIGGER friend_Handle BEFORE INSERT OR UPDATE ON Profile
```

```
    FOR EACH ROW EXECUTE PROCEDURE friend_Handle();
```

```
CREATE OR REPLACE FUNCTION page_Follow_Control() RETURNS trigger AS $follower_Handler$
```

```
    DECLARE
```

```
    UserAge := Profile.BDay-current_timestamp;
```

```
    BEGIN
```

```
    IF UserAge < Page.Age_limit THEN
```

```
        RAISE EXCPETION 'Age not allowed';
```

```
    END IF;
```

```
END;
```

```
$follower_Handler$ LANGUAGE plsql;
```

```
CREATE TRIGGER follower_Handler BEFORE INSERT OR UPDATE ON Page_Followers
```

```
    FOR EACH ROW EXECUTE PROCEDURE follower_Handler ();
```
