

# Alt-F4 High Level Design

## User Authentication

**Purpose:** Handles login/logout and account creation.

### Public API

**login(email, password) : Account**

- Django handles it.

**logout(Account)**

- Logs a user account out of the website. Django handles it.

**register( AccountDetails(registration information) ) : Account**

- Attempts to charge the given credit card using Payment Processor.
- If successful, creates account in the database and returns the Account; upon failure, returns error and does not charge card.

## **MemberAccount**

**Purpose: Main class of accounts.**

### **Data**

- Account Details (Email, Name, Date of Creation)
- Additional account info(address, birthday, Credit Card Info (stripeld))
- isVerified - whether the accounts payment has been verified
- Points

### **Public API**

#### **createPost(Post)**

- Creates a post on the account and adds it to the database

#### **createComment(Post, CommentPost)**

- Adds a comment to the given post

#### **getPosts() : Posts**

- Gets a pointer to the users posts

#### **invite(email)**

- Sends an invite to the given email with a registration link

#### **editFilters(Post, Content)**

- Uses Model 1's API to edit filters on photos

## **AdminAccount : MemberAccount**

**Purpose: Child class of Account, holds actions an admin can do.**

### **Public API**

#### **getters() and setters()**

#### **removePost( Post )**

- Removes the users post from the database

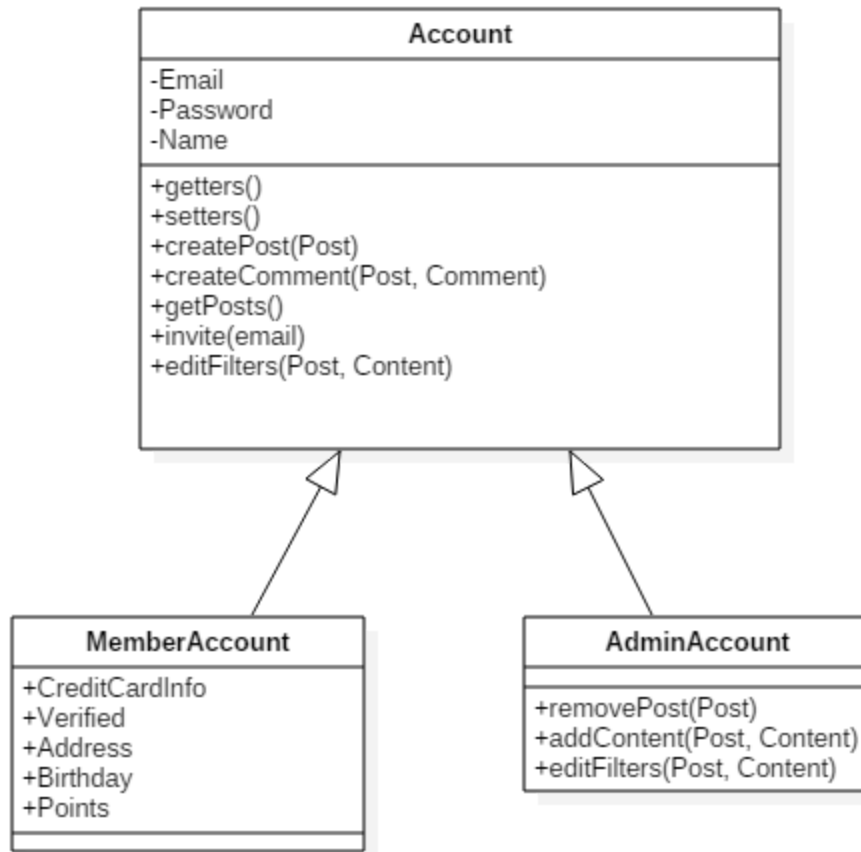
#### **addContent(Post, Content)**

- Adds content to any users post like hashtags and urls

#### **editFilters(Post, Content)**

- Uses Model 1's API to edit filters on photos

Prof:



## Post

**Purpose:** Base class for all post. Contains all data required for a post

### Data

- **Content**
- **Datetime**
- **Comments**
- **PostID**

### Public API

**getters() and setters()**

## CommentPost : Post

Purpose: Contains data for a comment on a post, inherits from Post.

### Data

- ParentPostID
- CommentPostID
- CommenterID

### Public API

getters() and setters()

## PhotoPost : Post

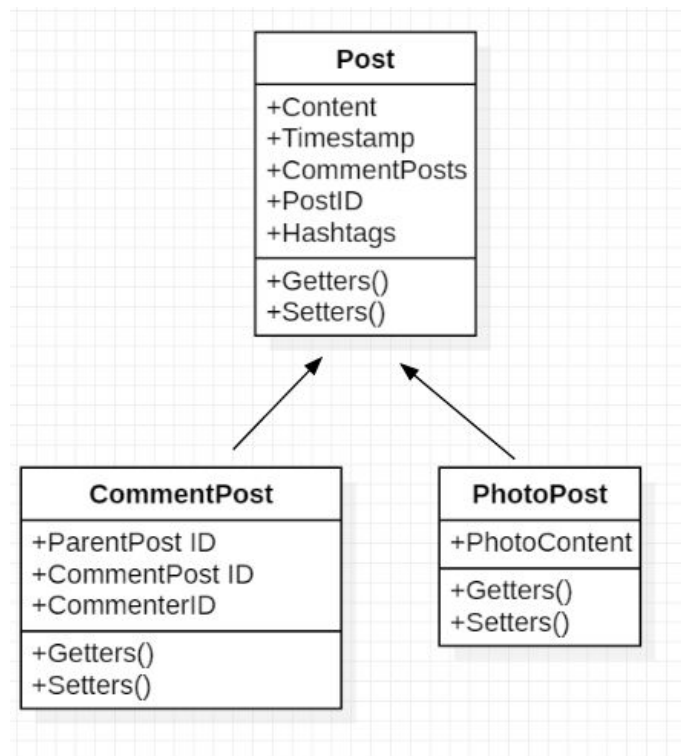
Purpose: Contains image data for a photopost

### Data

- PhotoContent → the image content stored in the format Model 1 chooses

### Public API

getters() and setters()



## PaymentProcessor

**Purpose:** Charges user accounts and verifies charge amounts

**Public API**

**getters() and setters()**

**chargeUser(Account)**

- Charges the accounts credit card
- Returns true if charged successfully, returns false if invalid card credentials.

**verify(Account, amount, month)**

- Sets the account to verified
- Return true/false if the amount they entered is how much was charged

## StripePaymentAdapter : PaymentProcessor

**Purpose:** Implements payment processor to support Stripe API

**Public API**

**chargeUser(Account)**

- Charges the accounts credit card
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- Returns true if charged successfully, returns false if invalid card credentials.

**verify(Account, amount, month)**

- Sets the account to verified
- Return true/false if the amount they entered is how much was charged

Payment Processor
+ChargeAmount
+getters() +setters() +setPaymentAdapter(Payment Adapter) +chargeUser(Account) +verify(Account, amount)