## User

+username: str +email: str +password: str +first\_name: str +last\_name: str

+profile\_picture: ImageField +friends: ManyToManyField +groups: ManyToManyField

+posts: ForeignKey +notifications: ForeignKey

+create\_profile() : void +update\_profile() : void

+send\_friend\_request(user: User) : void +accept\_friend\_request(user: User) : void +decline\_friend\_request(user: User) : void +create\_post(caption: str, media: File) : void

+like\_post(post: Post) : void

+add\_comment(post: Post, comment: str) : void

+share\_post(post: Post) : void

+send\_message(user: User, message: str) : void +receive\_message(user: User, message: str) : void

+join\_group(group: Group) : void +leave\_group(group: Group) : void +get\_notifications() : QuerySet

# Group

+name: str +description: str

+members: ManyToManyField

+posts: ForeignKey

+create\_post(caption: str, media: File) : void

+get\_posts() : QuerySet

#### Post

+user: ForeignKey +caption: str +media: File

+likes: ManyToManyField +comments: ManyToManyField

+share\_count: int

+create\_comment(comment: str) : void

## Comment

+user: ForeignKey +post: ForeignKey +comment: str

# Notification

+user: ForeignKey +message: str +is\_read: bool