**photos social network**

Andrés Cerdas Padilla, acerdasp@udistrital.edu.co

Fabián Yesith Aguilar Jimenez, fyaguilarj@udistrital.edu.co

Faculty of Engineering, University Distrital Francisco José de Caldas

1**. Introduction:**

Photo social networks have grown in popularity in recent years, allowing users to share special moments, connect with people and discover new ideas. This project proposes the development of a new photography social network inspired by Instagram, but with additional features and focused on user security and privacy.

**Features:**

* User registration: Users will be able to create a profile with personal information, profile photo and biography.
* Upload photos and videos: Users will be able to share photos and videos with descriptions, hashtags and location.
* Social interaction: Users will be able to follow other users, like and comment on posts, and send private messages.
* Content exploration: Users will be able to explore photos and videos by hashtags, categories and location.
* Personalization: Users will be able to personalize their profile with a cover photo, colors and other elements.

**2. System architecture:**

The platform will be divided into three layers:

* Presentation layer: Implemented with HTML, CSS and JavaScript, it will provide an intuitive interface for users to interact with the platform.
* Business logic layer: Developed in Django (Python) and FastAPI, it will be responsible for managing users, publications, comments and other system data.
* Data access layer: You will store the data in a PostgreSQL database using SQLAlchemy as the access layer.

**3. Development Methodology:**

The Agile methodology will be used for the development of the project, with an iterative approach that will allow for continuous testing and improvements. The platform will be gradually launched to different user groups to obtain feedback and optimize the user experience.

**4. Implementation:**

The development of the project will be carried out in the following stages:

1. Design and planning: The system requirements, architecture and development plan will be defined.
2. Front-end implementation: The user interface will be developed using HTML, CSS and JavaScript.
3. Back-end implementation: The application logic will be developed using Django (Python) and FastAPI.
4. Database Integration: The PostgreSQL database will be configured and data access operations will be implemented using SQLAlchemy.
5. Testing and debugging: Extensive testing will be performed to ensure the quality of the software.
6. Launch and maintenance: The platform will be launched to users and continuous improvements will be made.

**5. Conclusions:**

This project aims to create a successful and secure social photo platform that meets the needs of users and generates value for stakeholders. The use of modern technologies and an agile development methodology will guarantee the quality and success of the project.