CPTR – A “Creative By Default” GIF Sharing Platform

## CS598 Non-Thesis Project Planning Document

Developer: Colin Sanders – Version 1.0 – Spring 2022

## Overview & Purpose

In the social media space, there are obvious tech-giant applications for sharing most types of content: Instagram for images, Twitter for short text messages, TikTok for 30 second videos. However, there is a market niche for a GIF sharing app (animated photo, approximately 2 seconds long). The last application to attempt to deliver in the GIF-sharing market was Phhhoto. Phhhoto, at its peak, had 3.7 million monthly users, and due to industry anti-competitor practices from Meta / Facebook / Instagram, Phhhoto was unable to grow into a similar social media giant and shut down, while Instagram released a copy-cat standalone app with similar functionality to Phhhoto’s camera called Boomerang. However, Phhhoto’s built-in camera functionality made it easier to create visually appealing and creative GIFs than Boomerang, which acted more like a standalone studio app that could export GIFs to the diverse-content app (rather than restricting to one type of content) Instagram.

What made Phhhoto’s camera functionality stand out? The app leveraged mobile users’ cameras and captured 4 images a few tenths of a second apart, stringing them together in a GIF format. Through a combination of this loop, a slight intentional quality loss bringing out the pixels in the images, interesting color filters, and unique font styling on captions, the GIFs created by this app were extremely visually appealing and enjoyable to create even by the non-creative user. A few examples of the content being created on the app are shown below.



The goal of the app CPTR (pronounced “Capture”) is to recreate this experience of capturing and creating GIFs, with slogan “Creative By Default”. All content being created should be visually appealing and make the app’s users feel creative, similar to the spiritual predecessor Phhhoto.

## Objectives & Deliverables

1. Create a minimally-viable iOS app that has the ability to create looping GIFs and apply filters to these GIFs, exporting to device and other social media apps.
   1. Includes basic social media functionality such as user profiles and authentication, following feeds, explore feeds, tags, etc.
   2. Technology Used: React Native, FFMPEG, AWS Amplify SDK
2. Create a minimally-viable, scalable and easily deployable cloud backend / API that leverages AWS services such as AWS Cognito Pools (auth), AWS S3 (GIF storage), AWS AppSync (GraphQL API), put together using AWS Amplify (all-in-one mobile backend service) and AWS CloudFormation (scriptable infrastructure-as-code)
3. Create a set of internal tools for creating and modifying the core image processing pipeline (built with FFMPEG). Long-term stretch objective is to develop a filter-preview / creation CLI that exports FFMPEG filter graphs to be deployed into the application.
   1. Technology Used: Python, FFMPEG
4. Develop a marketing strategy for promoting the application, including a website (<http://cptr-app.com/>) and social media accounts.
5. Create necessary legal documentation including a Terms of Service document, a Privacy Policy, and look into LLC formation
6. Develop a release strategy!

## Timeline