Social Media Sharing Customization Project Proposal

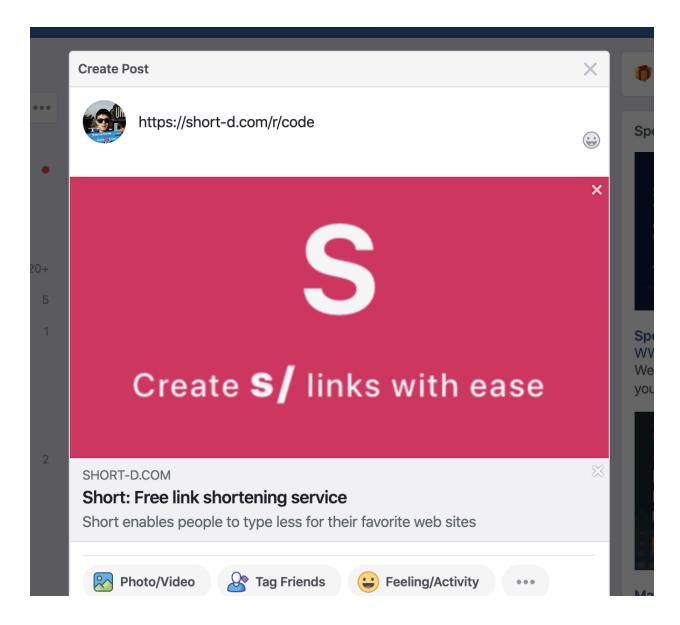
Authors:byliuyang@ Date: 05/08/2020

Objective

Enable marketers to customize the summary card of the short links they shared on Facebook, Twitter, and LinkedIn.

Background

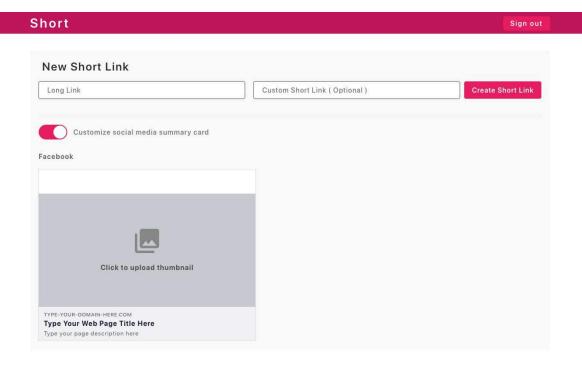
All the short links shared on social media platforms have the same summary card:



When sharing a web link on Facebook or LinkedIn, the social media sites fetch and render the post based on the Open Graph (OG) tags embedded in the HTML.

Requirements

- Automatically fetch the title, the description & the thumbnail from the original long link
- Allow users to customize the summary card when they are creating a new short link
- Support inline editing for the summary card
- Allow users to edit summary card after the short link is created



Deliverables

Annotations

Priorities

- P0: Emergency
 - Service Crash
 - Security attacks
 - o Production bug preventing users from using the product
- P1: High priority
 - Core new features
 - o Refactors significantly improves engineering productivity
- P2: Medium priority
- P3: Low priority

Size

- XL: Take more than a month to deliver
- L: Take roughly 2 weeks to deliver
- M: Take 1 week to deliver
- S: Can be done within a day
- XS: Can be done with in an hour

Stage 1

Item	Priority	Size	Owners	State
Create DB table to save custom OG tags, including title, URL, description and thumbnail URL	P0	xs	kapillamba4 @	Done
Build gRPC api to fetch OG tags from DB	p1	М	kapillamba4 @	Done
Replace Nginx with custom frontend server to serve web UI	p1	S	kapillamba4 @	
Serve custom OG tags for the UI when users visits /r/:alias	p1	S	kapillamba4	Prototyped In Progress
Create API key authenticator for cloud APIs			byliuyang@	Done
Build API key verification library			byliuyang@	In Progress
Build API rate limiting library			ashakibp@ byliuyang@	
Build caching library to serve OG tags from memory to improve performance				
Build API quota limiting library			arberiii@	
Build configuration synchronization library (PubSub / ZooKeeper)			ashakibp@ byliuyang@	
Build admin panel to generate API key				
Build admin panel to configure rate threshold				
Build admin panel to configure API quota				

Add GraphQL api to update OG tags in DB	p1	М	kapillamba4 @	
Build Facebook post React component to render OG tags	p1	М		
Build Twitter post React component to render OG tags	p1	M		
Build LinkedIn post React component to render OG tags	p1	М		
Develop simple file upload API	p1	М		
Build image editor in React	p1	L		
Support inline editing through Facebook post React component	p1	М		
Integrate image editor, image upload API and OG apis with Facebook post UI	p1	М		
Add social media summary toggle to dynamically show and hide social media customization section	p1	S		

Stage 2

Item	Priority	Size	Owner	State
Create Web Crawler to fetch OG tags given URL	p2	L		
Automatically fetch OG tags for a page if custom tags are not provided when creating short link	p2	S		