



# Dawarly

The fastest way to get  
your lost things

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# Agenda

- Motivation
- Problem
- Solution
- Users
- Application features
- Why Dawarly?
- Technology
- Future work



حطي الديمو هنا



Have you ever lost any thing in mall or street?



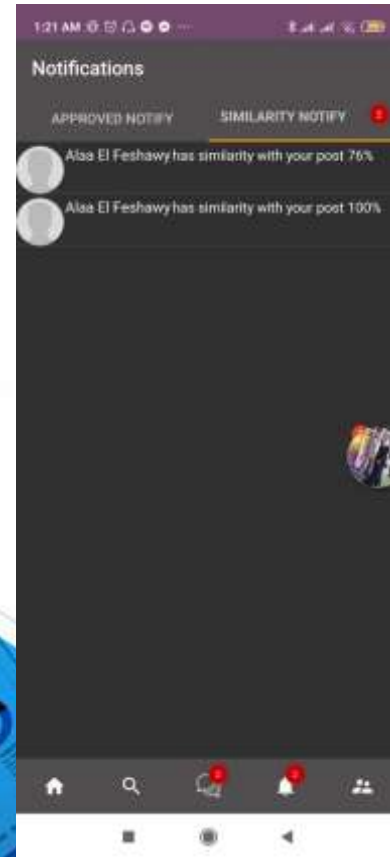
# Problem

- In our daily lives, we are all prospect to facing the problem of losing something from our important properties and most of time we don't get it back.
- Also sometimes found something on the street or shop lost from someone.
- Many of people write posts on social media about missing people.



# Solution

A Mobile application that provide to users writing posts about lost\found thing or human then the application measure the similarity between the two posts then immediately send notification to the users who wrote these posts.



# Dawarly Users

- More than 25 years old.
- Have smart phones.





# Application features

Write  
post

Search

Save  
post

Chat

Report  
post





# Why Dawarly?



Save time



Fast access



Verify the user



Ease of use.



One platform for lost\ found items or people.

# Technologies



Android



API's



Text  
Similarity



# Text Similarity

(Edit Distance) `LevenshteinDistance("look at", "google") == 5`

	j	-	"g"	"o"	"o"	"g"	"l"	"e"	
i	-	0	1	2	3	4	5	6	
"l"	1		1	1	2	3	4	5	
"o"	2		1	2	2	2	3	4	
"o"	3		2	2	2	2	3	4	
"k"	4		3	2	2	3	3	4	
-	5		4	3	3	3	4	4	
"a"	6		5	4	4	4	4	5	
"t"	7		6	5	5	5	5	5	

Cosine Similarity:  $(\text{longerLength} - \text{editDistance}(\text{longer}, \text{shorter})) / (\text{double}) \text{longerLength};$

# OpenCV

Oriented FAST and rotated BRIEF (ORB) is a fast robust local feature detector, first presented by Ethan Rublee et al. in 2011,[1] that can be used in computer vision tasks like object recognition or 3D reconstruction. It is based on the FAST keypoint detector and a modified version of the visual descriptor BRIEF (Binary Robust Independent Elementary Features). Its aim is to provide a fast and efficient alternative to SIFT.



# Future work

Our next steps in improvements are make our system:

- Support Android ND IOS application.
- Improve text similarity
- Improve image processing
- Add more features in google location like search, directions.. etc.
- Explore user needs by making surveys.



# Thank You

