# Rakshak

Flagging Fraudulent Lending Apps



# Problem Analysis

- We aim to provide Technology solution to identify fraudulent digital lending apps.
- Fraudulent apps' features:
- Mimic normal finance apps
- **Gathers** information through **unnecessary permissions** of Contact Logs, cameras, files, media and audio of the users.
- -Blackmailing using personal info and morphing the media
- -Foreign-based app developers without a local presence in India pose a challenge for traceability.

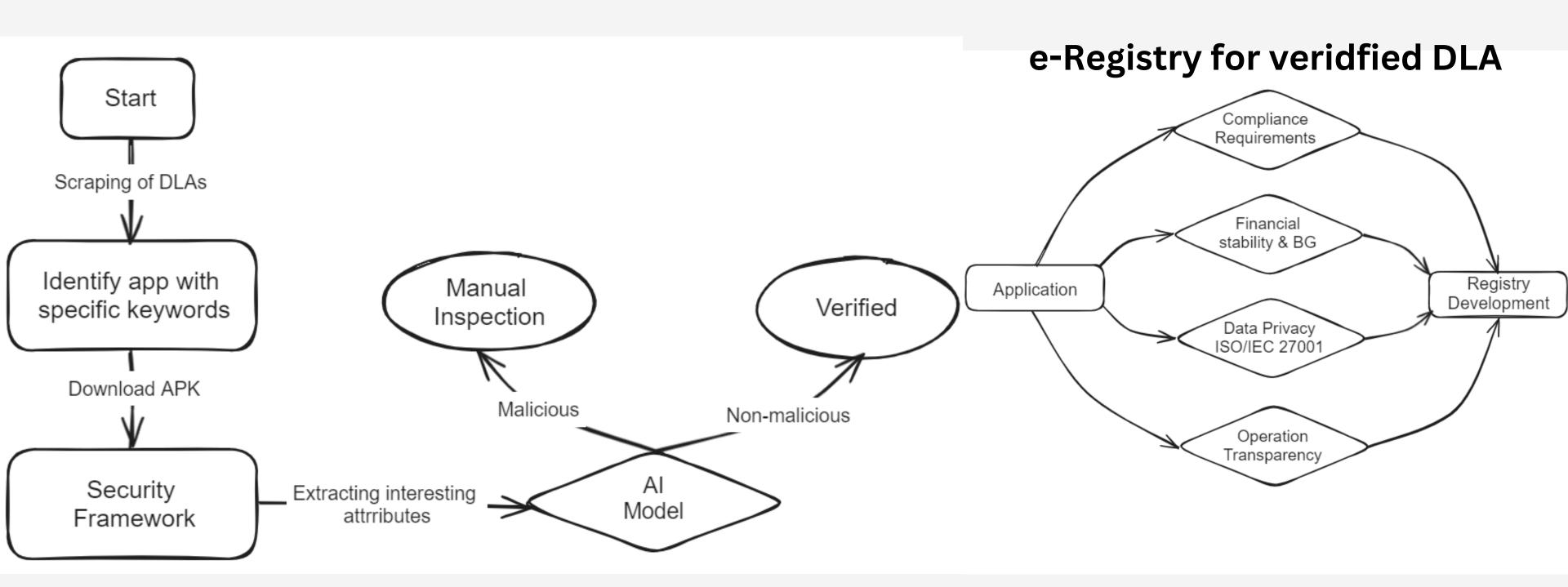
### Importance

- RBI conducts education and awareness campaigns, but people still fall clickbait for such fraudulent apps.
- The country loses Rs.
  100 Crores to banking fraud every day (Source: TOI)





# Proposed Solution



### Outcome

### **APP SCORES**



Security Score 64/100

Trackers Detection 3/432

### FILE INFORMATION

File Name finance.empower 4.5.2.121.apk

Size 44.53MB

MD5 10a8133a35c31960fd1afc9a449e447c

SHA1 4d334f38de5ba62c1abcd74c8d04c83e6b41bf9b

SHA256 e683a8c86f7c20aadbe4cfc75c20286e8c7508246ab20226eebb1e48c3bf1b1b

### **i** APP INFORMATION

App Name Empower

Package Name finance.empower

Main Activity finance.empower.android.app.LaunchActivity

Target SDK 28 Min SDK 22 Max SDK

Android Version Name 4.5.2.121 Android Version Code 1384

### **▶** PLAYSTORE INFORMATION

Title Empower: Advance & Credit

Score 4.725078 Installs 1,000,000+ Price 0 Android Version Support Category Finance Play Store URL finance.empower

Developer Empower Finance, Developer ID Empower+Finance

Developer Address 660 York St Suite 102 San Francisco, CA 94110

Developer Website https://empower.me

Developer Email | Support@empower.me

Release Date Dec 4, 2017 Privacy Policy Privacy link

Description

Need extra cash to make it to your next paycheck? Empower's got your back. Get an Advance of up to \$300 instantly.\* Say goodbye to overdraft fees and stressing about money. No credit score or security deposit to qualify.

GET AN INSTANT ADVANCE OF \$10 TO \$300

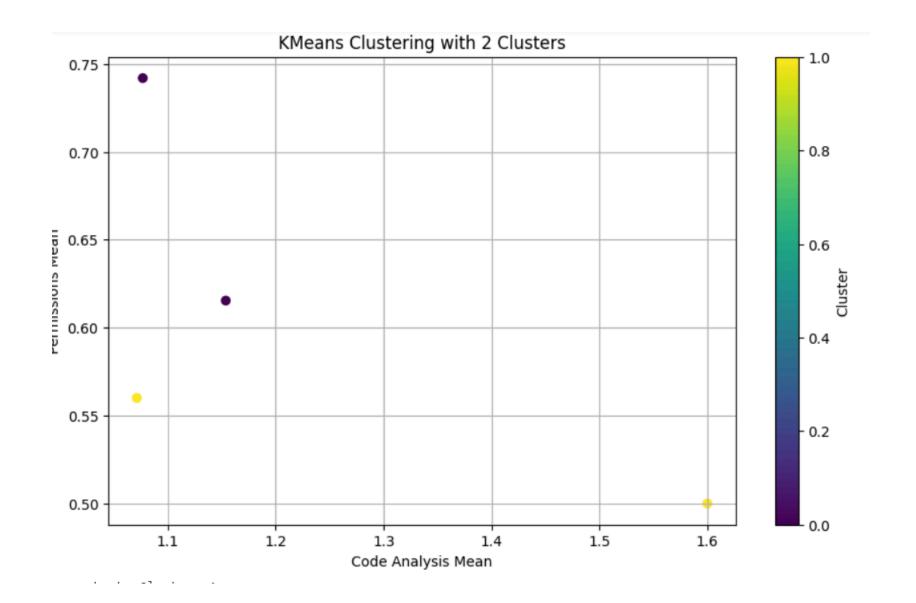
Tight on cash and tired of asking friends to cover you? Empower will float you anywhere from \$10 to \$300 when you need it most. Instant delivery available. No interest, no late fees, no credit checks. Just pay us back when you get your next paycheck.

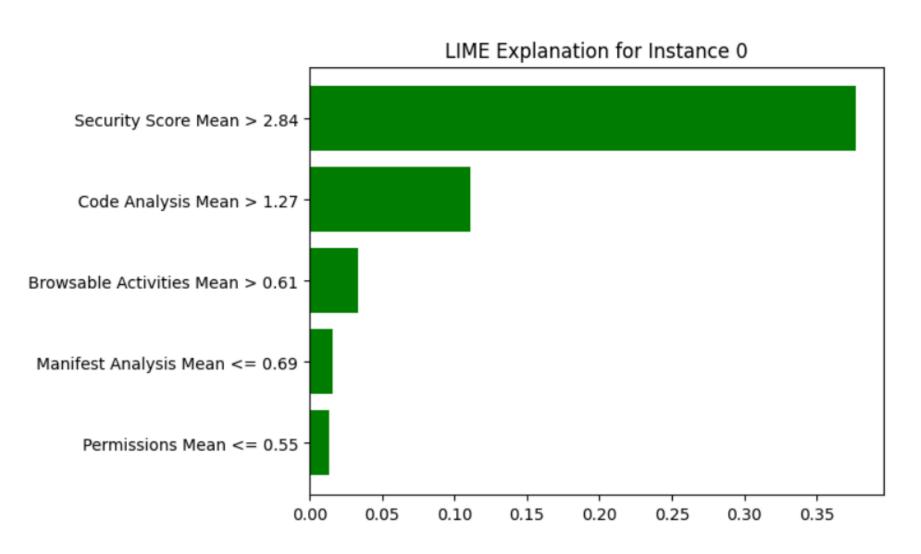
An Advance is NOT a personal loan:

- No mandatory minimum or maximum repayment timeframe

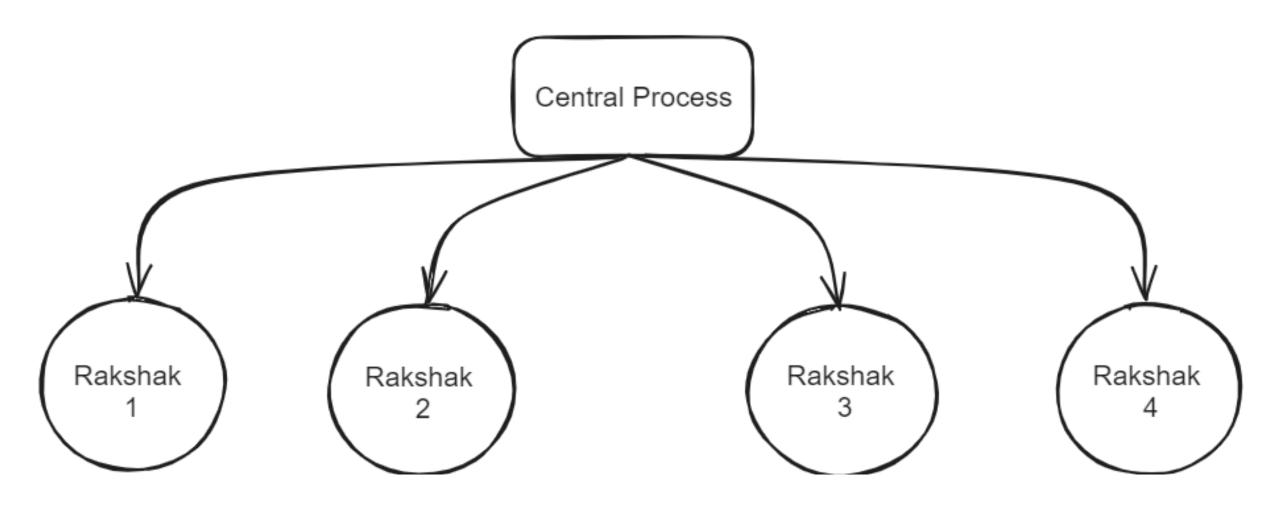
### Machine Learning Approach

Results XAI (Lime)





# Scalability of Solution



- Containerization: Usage of docker
- Modularisation: Independent micro-services
- Horizontal Scalability: Increasing number of Rakshak bots

### Benefits to users

- Reduced workload for regulatory bodies in manually identifying fraudulent apps.
- Protection of consumers from financial exploitation and privacy violations.
- Improved reputation and credibility of legitimate digital lending platforms.
- Consistent protection across all user devices (android, iOS, etc.)

### Impact

- Creation of a safer digital financial environment, promoting financial inclusion.
- Data-driven insights for policymakers to refine regulations and guidelines.
- Significant reduction in financial fraud cases related to digital lending.
- Enhanced cybersecurity awareness among the general public.
- Strengthened regulatory framework for digital financial services.

### Thank You