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## Project Preproposal

### Project Goal and Objectives

#### *Motivation*

We will apply data mining and machine learning tools and techniques to build an intelligent app for managing and organizing publicly issued safety notifications.

#### *Significance*

A product safety app can prevent harmful losses relating to health, property, and finance. By collecting and processing a variety of sources, it is possible to provide useful consumer information in a single location.

#### *Objectives*

The primary objective of this app is to aggregate public safety warning and recall notices. By organizing safety data across categories, we aim to offer notification services to guests and subscribers. A guest should be able to search, sort, and read based on criteria they enter. Registered users should be able to subscribe and receive notifications based on their stored preferences.

#### *Datasets*

Consumer Product Safety Commission - All Recalls

<http://www.cpsc.gov/en/Newsroom/CPSC-RSS-Feed/Recalls-RSS/>

USA.gov Recalls and Safety Information

<http://www.usa.gov/Topics/Reference-Shelf/Libraries/RSS-Library/Consumer.shtml#Recalls>

US Food and Drug Administration - Recalls & Safety Alerts

<http://www.fda.gov/AboutFDA/ContactFDA/StayInformed/RSSFeeds/Recalls/rss.xml>

Consumer Product Safety Information Database

<http://www.saferproducts.gov/faq-developers.aspx#faq1> (uses <http://www.odata.org/>)

<http://www.saferproducts.gov/WebApi/Cpsc.Cpsrms.Web.Api.svc/>

#### *System Features*

Users of our app should be able to search for and subscribe to receive notifications in any category. Further, users should be able to register a manufacturer of any recently purchased product in order to monitor for future recalls. No notifications or spam emails shall be sent unless valid categorical matches are made to our users.

## Related Work

This is a list of related apps found on the Android marketplaces:

[Recall Watch](#) - Includes government data and links to share across social media channels.

[Recalled!](#) - Aggregates the US Consumer Product Safety Commission and Food and Drug Administration recall notifications.

[Recalls Plus](#) - Parent-centric app featuring product watch lists for recall notifications.

## Backup Project

If a product safety and recall app does not address requirements of the project, we would like to explore distributing energy consumption data in graphs or over a regional map. Other data such as historical traffic records or labor statistics may also be presentable in a regional map format. Such sources are published in Amazon Web Services and Data.gov.

## Bibliography

*Recall Watch*. Computer Software. Google Play Store. Vers. 2.0.1. Stellar Computer Systems, 11 Jul. 2011. Web. 1 Jan. 2014.

<<https://play.google.com/store/apps/details?id=com.stellarpc.feeds.recallwatch&hl=en>>

Mack, R. *Recalled!* Computer Software. Google Play Store. Vers. 1.03. Mack, R. 6 Jun. 2011. Web. 1 Jan. 2014.

<<https://play.google.com/store/apps/details?id=com.rmackconsulting.recalled&hl=en>>

*Recalls Plus*. Computer Software. Google Play Store. Vers. 1.1.1. SAP AG. 27 Apr. 2012. Web. 1 Jan. 2014 <<https://play.google.com/store/apps/details?id=com.sap.recallsplus&hl=en>>