APP Recommender

Distribution Monitoring and Management

- Manage Business Related Factors
- Search Engine Expert
  - Monitor KPIs
  - Manage Behavior
  - Supervise Knowledge Learning
- Fusion-based Recommender Expert
  - Monitor KPIs
  - Manage Behavior

App Distribution Infrastructure
AppStore Business Factors

/dev
App Providers

CATAPPULT

publishing apps

apps & related metadata

Semantic Search Engine

KPIs / Learning | Operation Rules

- Entity Recognizer
- Semantic Matching and Disambiguation
- Automatic Knowledge Learning

App Store Search Engine Integration
Elastic Search

Multicriteria App Profiling
- Characteristics
- Popularity
- Revelant Location
- ...

Multicriteria User Profiling
- Preferences
- Location
- Social Relations
- ...

App Usage and User Context
Encoded

Fusion-based Recommender System

KPIs

Operation Rules

- Filter and Combination Services
- Fusion-based Recommender

App Store Contact Points
Homepage, App Bundles, App View

App Discovery

Pseudo Anonynimization Layer
Encoding/Decoding Users Private Data

Query / User Intention
Inputs for Semantic Learning

User's App Related Context
Apps Installed, Location, ...

Multicriteria Intelligent App Recommendations
Based on location, prior recommendations, friends, ...

Search apps in the App Store

Use the App Store

Discover Apps browsing the Store

Content Aware Semantic Intelligent Search Results

Aptoide
Your Android App Store

Context-aware App Discovery with Download Incentives
AppCoins / Proof of Attention

Caixa Mágica
Software

Intelligent App Distribution Towards an Optimized App Discovery

Objectives, activities and expected results

App Recommender aims to investigate and develop technologies capable of offering a certain application, to the right customer, at the right time, thus optimizing the distribution and discovery services of current applications, and fostering an optimized approach between companies and their target customers.

To this end, a multi-criteria recommendation system and a semantic search engine are offered as technologies. The promoting consortium consists of Caixa Mágica Software SA and ISCTE Instituto Universitário de Lisboa, bringing together the technical and scientific skills for its development. The probability of success of the scientific results found will be between 60% to 80% (medium-high%).

Impact

The project aims to have impact on the mobile app consumers, mobile app publishers and on the Aptoide app store, though Caixa Mágica, current lead promoter of this project that will bring the results to the market.

For the consumers, the impact will be in the ease of use, efficiency and satisfaction in the discovery of apps, because of the improved alignment between their needs, characteristics and context with the apps offered by the app store.

For developers and companies that promote mobile apps, the impact will be in the improved proximity to their targeted audience, optimizing the user acquisition and retention, and inherently the commercial success.

For Caixa Mágica and Aptoide, the impact will be on the optimized quality of service provided to consumers and companies, and in the consequent increase of the number of apps submitted to the store, active users and revenue.

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