

# IUPUI TRR: TRUST-BASED MOBILE APPS SELECTION AND ORDERING OVER TRADITIONAL FEEDBACK MECHANISM IUPUI

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## MOTIVATION

### Traditional Feedback Mechanism of Mobile App

- Number of downloads
- Number of installs/updates
- Number of ratings
- Average **rating score**, content
- Presence of **user reviews**

## GOAL



## RESULTS [1]

### Traditional Approach

App category	Kendall tau distance
Education	100%
Entertainment	33%
Business	33%
Books & References	33%
LifeStyle	33%
Music & audio	66%
Personalization	100%
Puzzles	66%
Tools	66%
Travel & local	0%

### Heterogeneous Apps

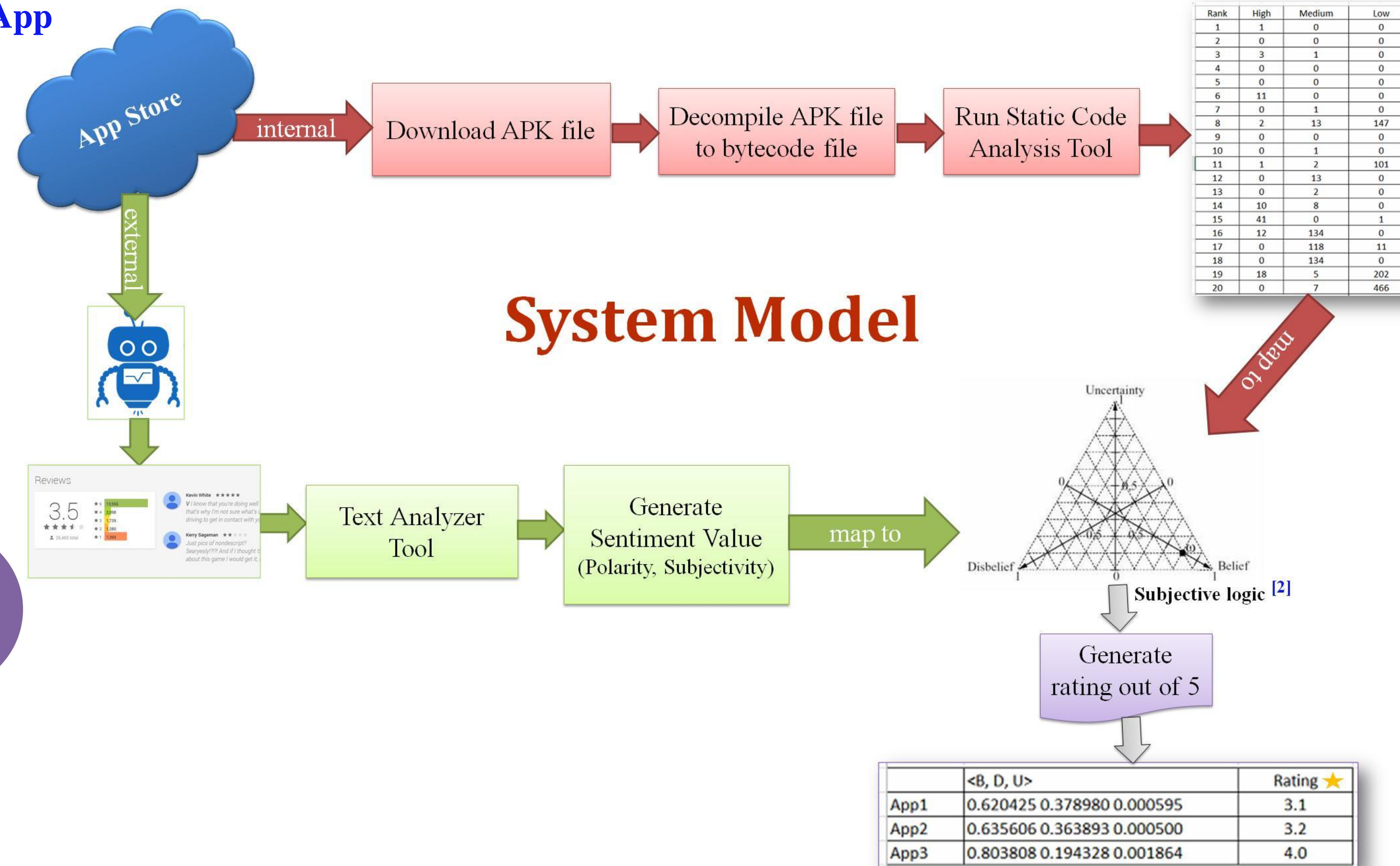
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## REFERENCES

- [1] Nahida Sultana Chowdhury, Rajeev R. Raje; "Disparity between the Programmatic Views and the User Perceptions of Mobile Apps"; 20th International Conference of Computer and Information Technology (ICCIT), Indexed by IEEE, 22-24 December, 2017.
- [2] A. Jøsang, "Subjective Logic: A formalism for reasoning under uncertainty," Springer Verlag, 2016.



### Traditional Feedbacks are not suitable!!!

- Self-selection bias
- Poorly written reviews
- Flood app stores with positive reviews before even launching their apps.
- Developers urge users and friends to downgrade competing Apps.
- Changes to an App Store can kill the review scores.

### Closer investigation reveals that-

- ❖ There are many similarities between the rankings, if the user is focused on the promised functional features of the app.
- ❖ As many users are not focused on the functional aspects only but give importance to other aspects (e.g., additional feature or look and feel).

## FUTURE INVESTIGATIONS

- ❖ To extend this trust based ordering by including evidences that will be collected during runtime; computed ranking can be considered as **dynamic ranking**.
- ❖ To apply the TRR approach to larger and diverse datasets.