Project: Reviewer Recommendation Tool for Web-based Code Review

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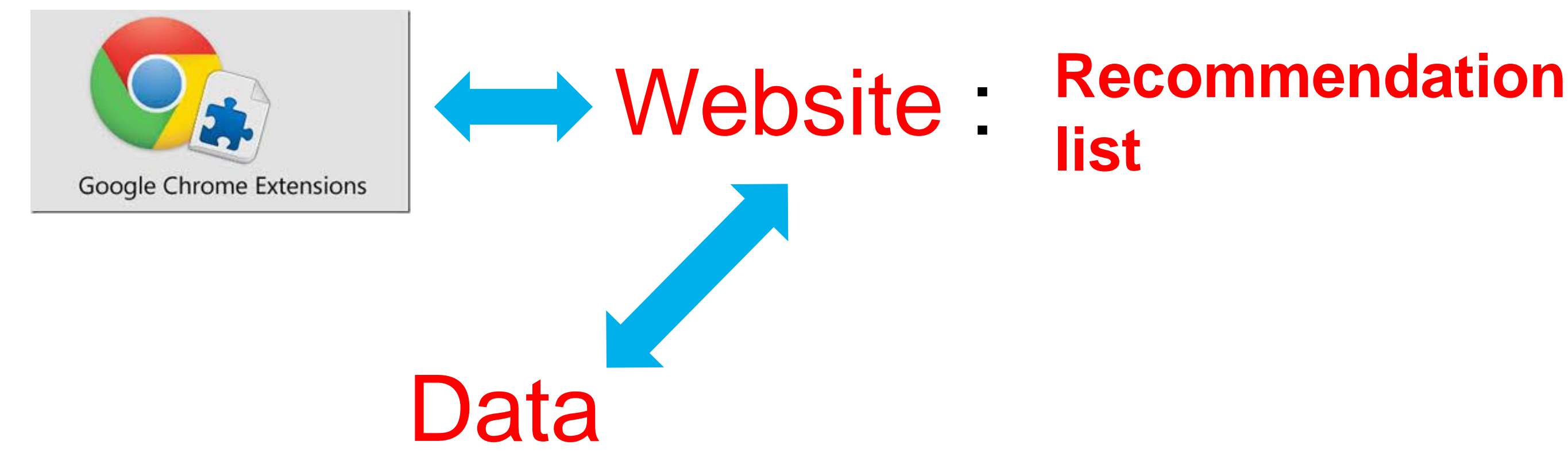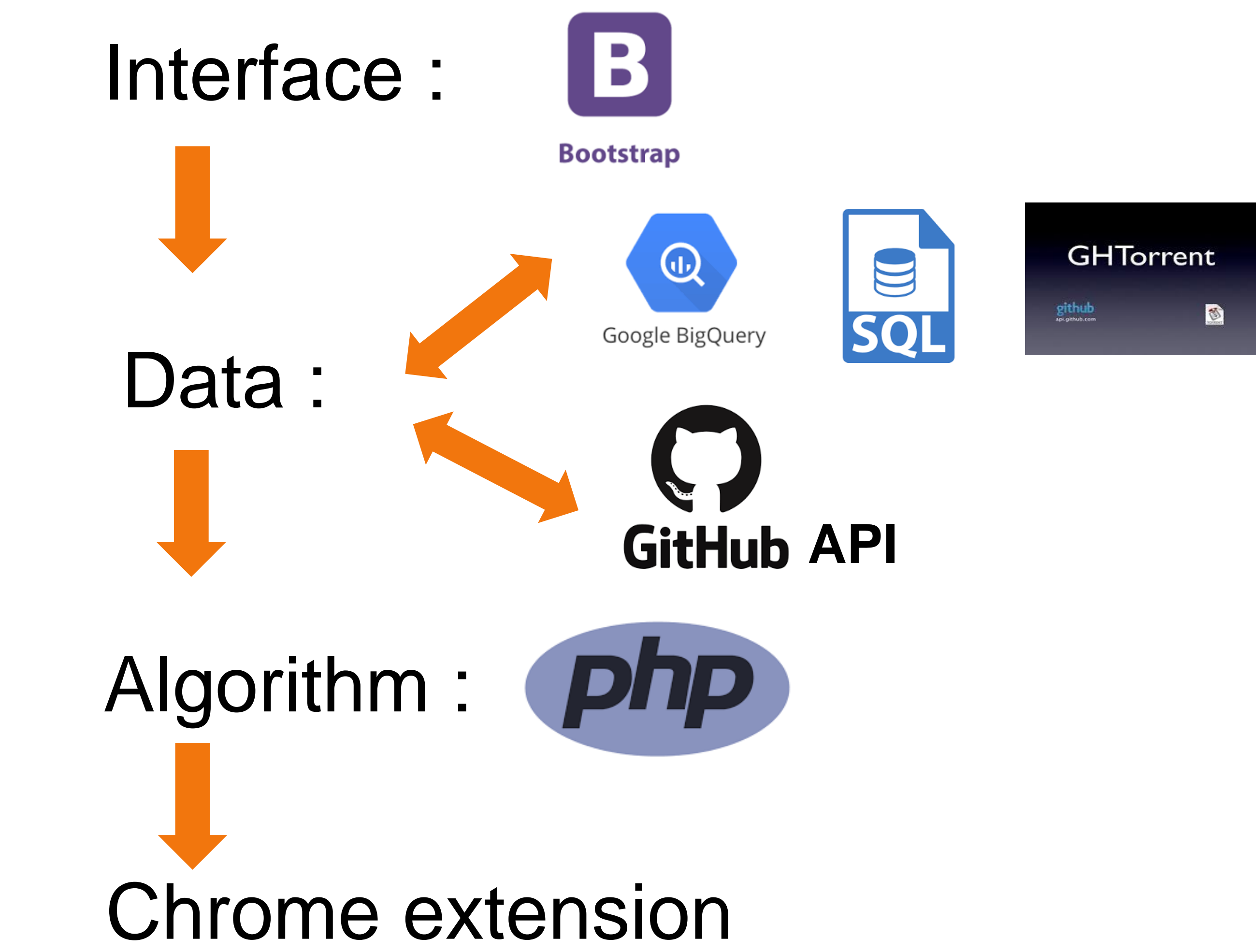
Goal

Help developers find appropriate reviewers

What have we made?

Chrome extension:

- **Reviewer recommendation list** → **Find a reviewer**

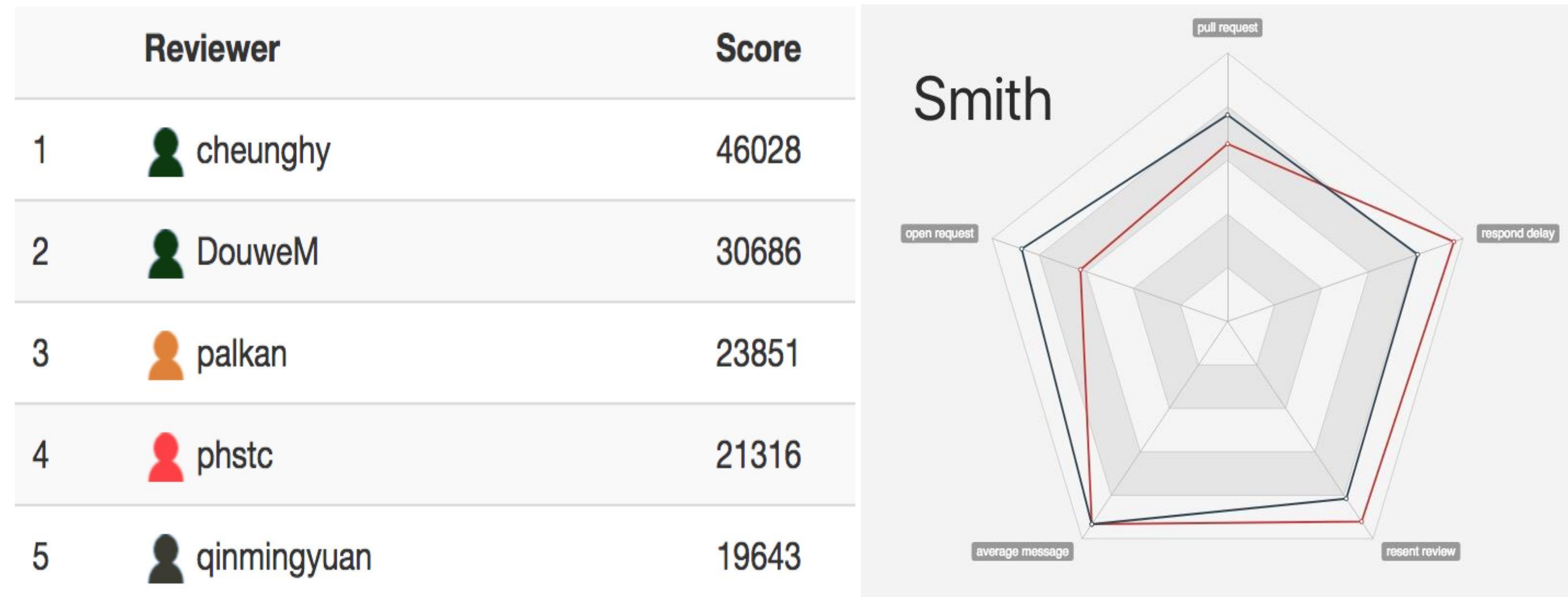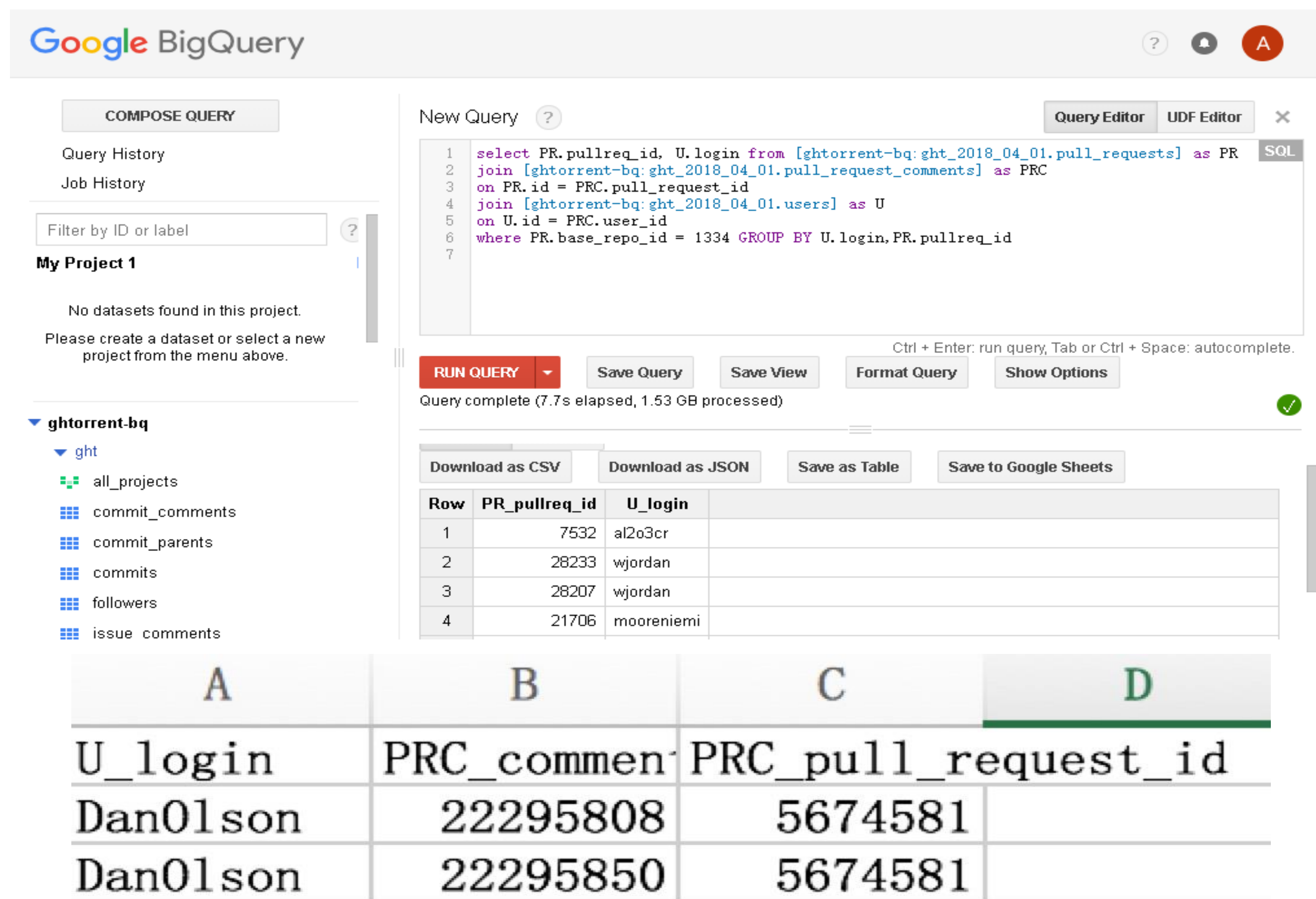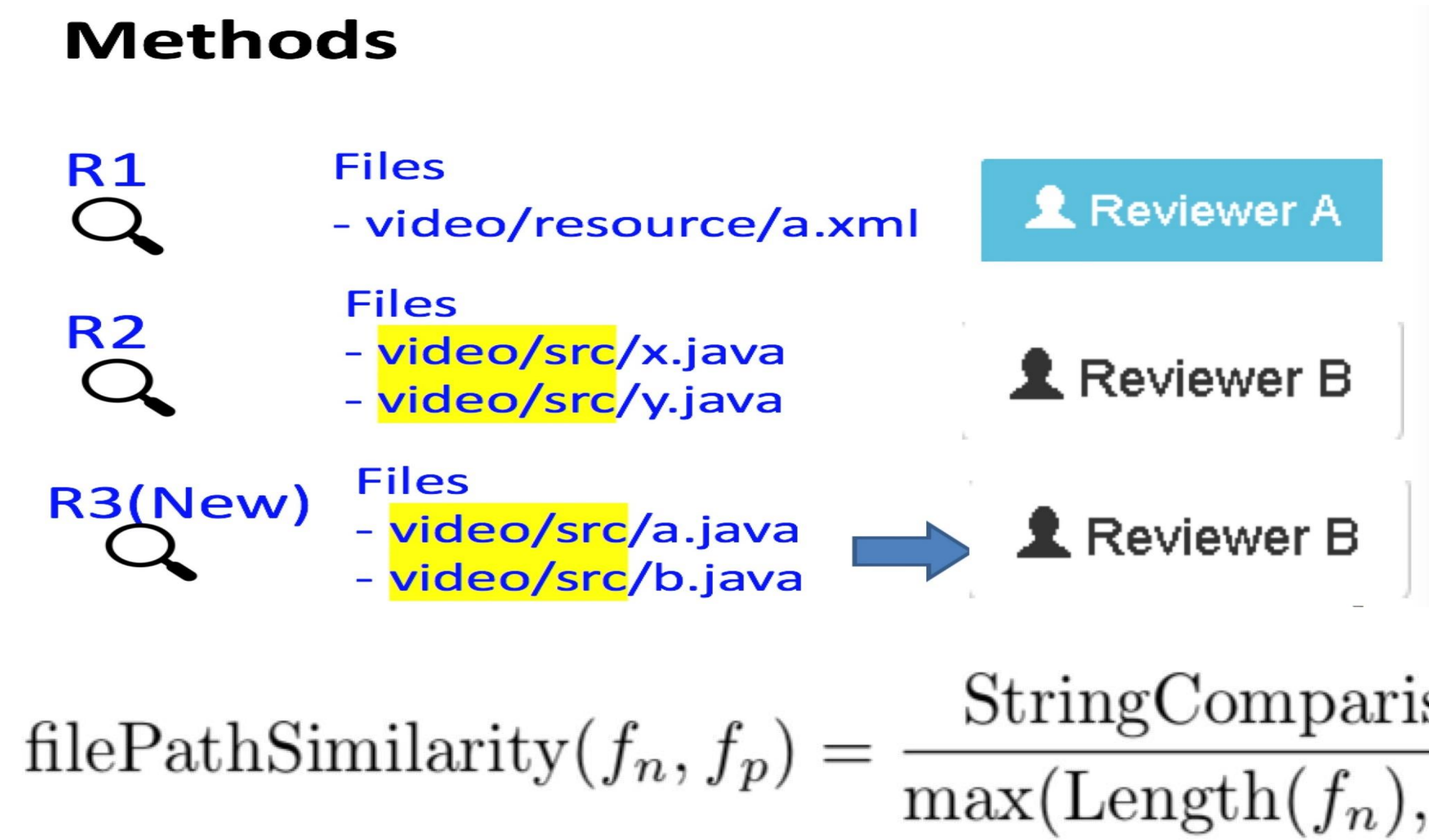- **Score for reviewers** → **Find an appropriate reviewer**

Google Chrome Extensions ↔ Website : **Recommendation list**

↕ Data

Tools

Interface : Bootstrap

Data : Google BigQuery / SQL / GHTorrent / GitHub API

Algorithm : php

Chrome extension

Step 1: Interface

Design and implementation the interfaces

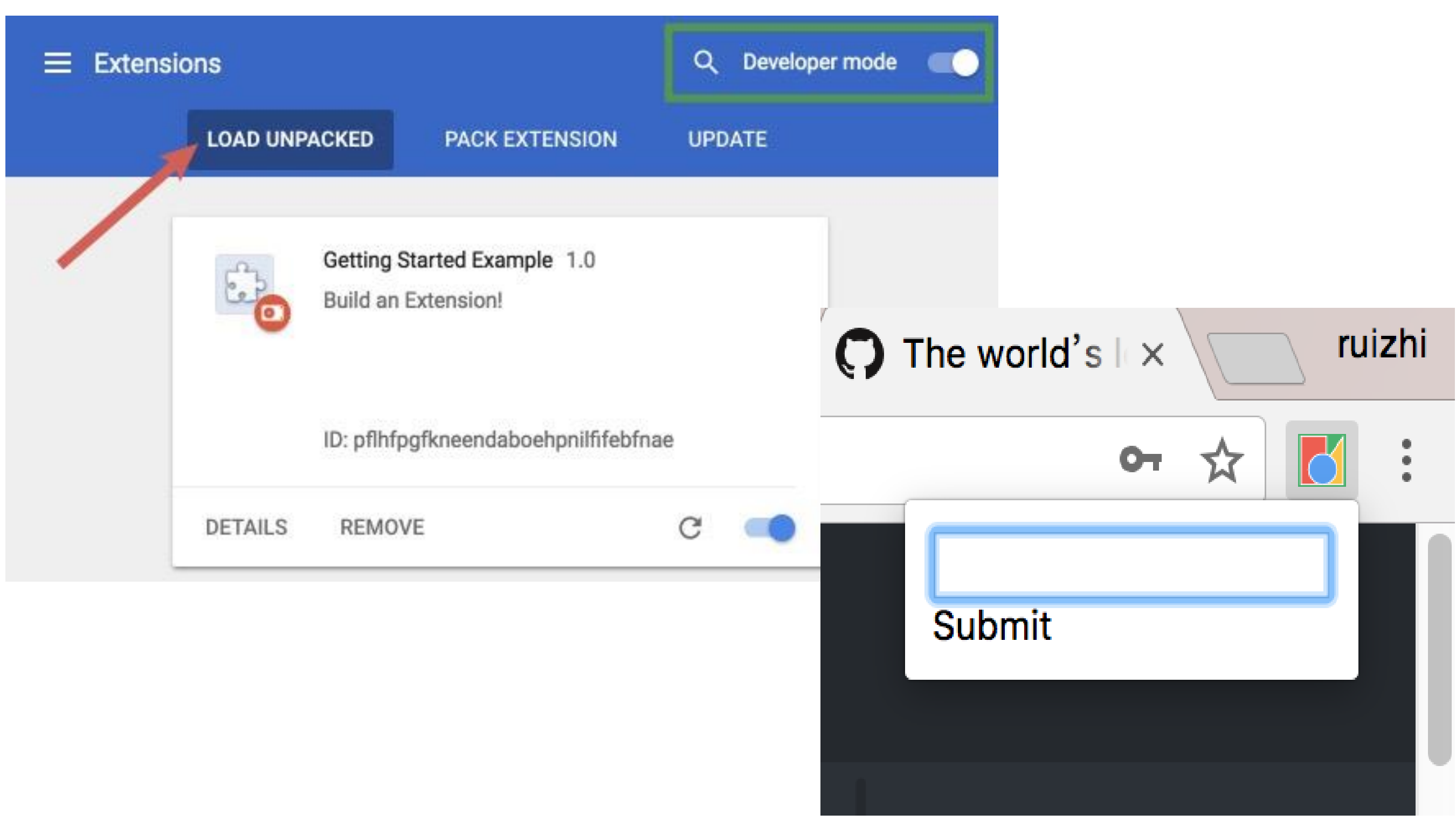|	Reviewer	Score
1	cheunghy	46028
2	DouweM	30686
3	palkan	23851
4	phstc	21316
5	qinmingyuan	19643

Smith

Step 2 : Download Data

A	B	C	D
U_login	PRC_commen	PRC_pull_request_id	
DanOlson	22295808	5674581	
DanOlson	22295850	5674581	

Step 3: Implement the ranking algorithm

Methods

R1 Files
- video/resource/a.xml → Reviewer A

R2 Files
- video/src/x.java
- video/src/y.java Reviewer B

R3(New) Files
- video/src/a.java
- video/src/b.java → Reviewer B

$$filePathSimilarity(f_n, f_p) = \frac{StringComparison(f_n, f_p)}{\max(Length(f_n), Length(f_p))}$$

Step 4: Add plug in

Result

	Reviewer	Score
1	cheunghy	46028
2	DouweM	30686
3	palkan	23851
4	phstc	21316
5	qinmingyuan	19643

Finally it will show the recommendation list and the radar map.
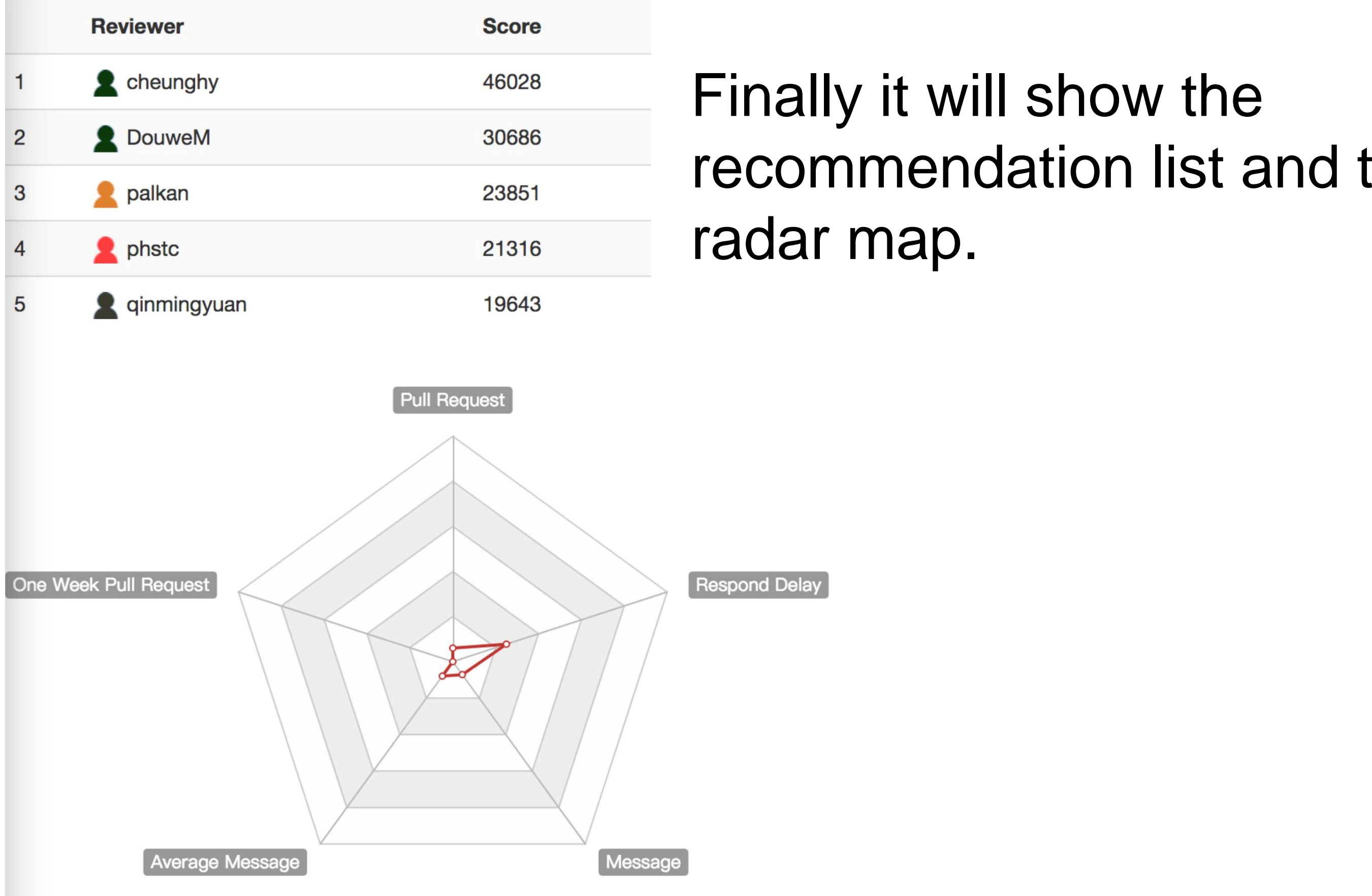
Improvement

- **Automatically add reviewers**

- **Automatically get the pull request ID**