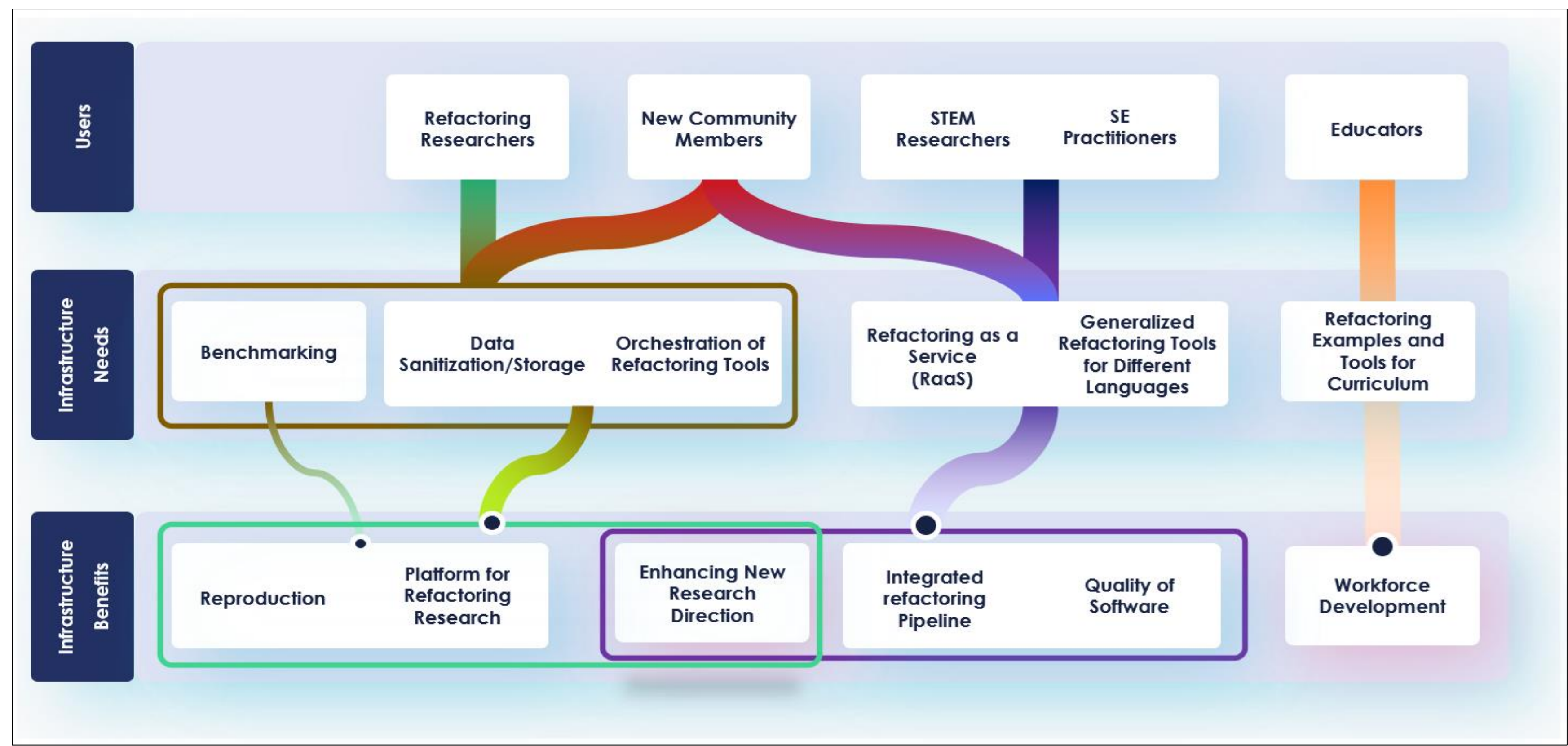


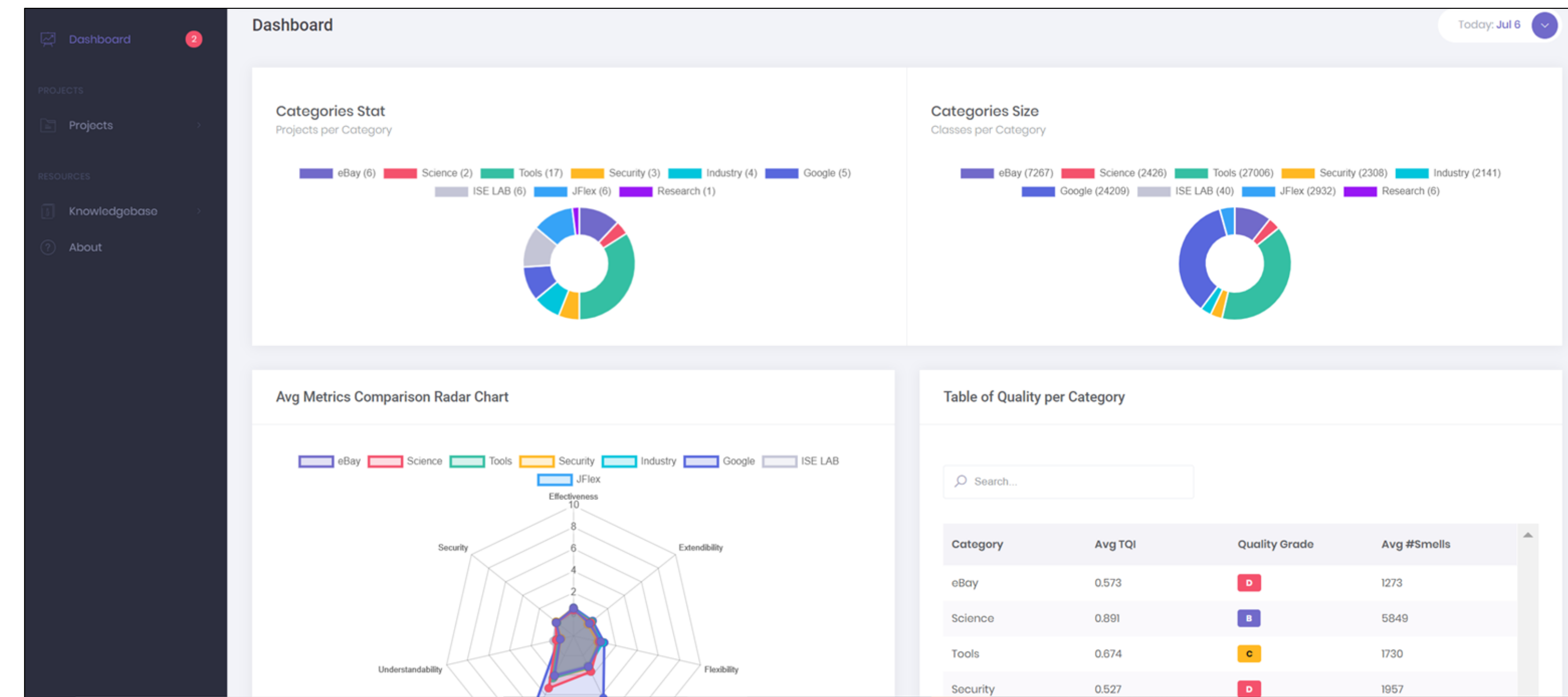
Collaborative Research: CCRI: New: A Software Refactoring Community Infrastructure

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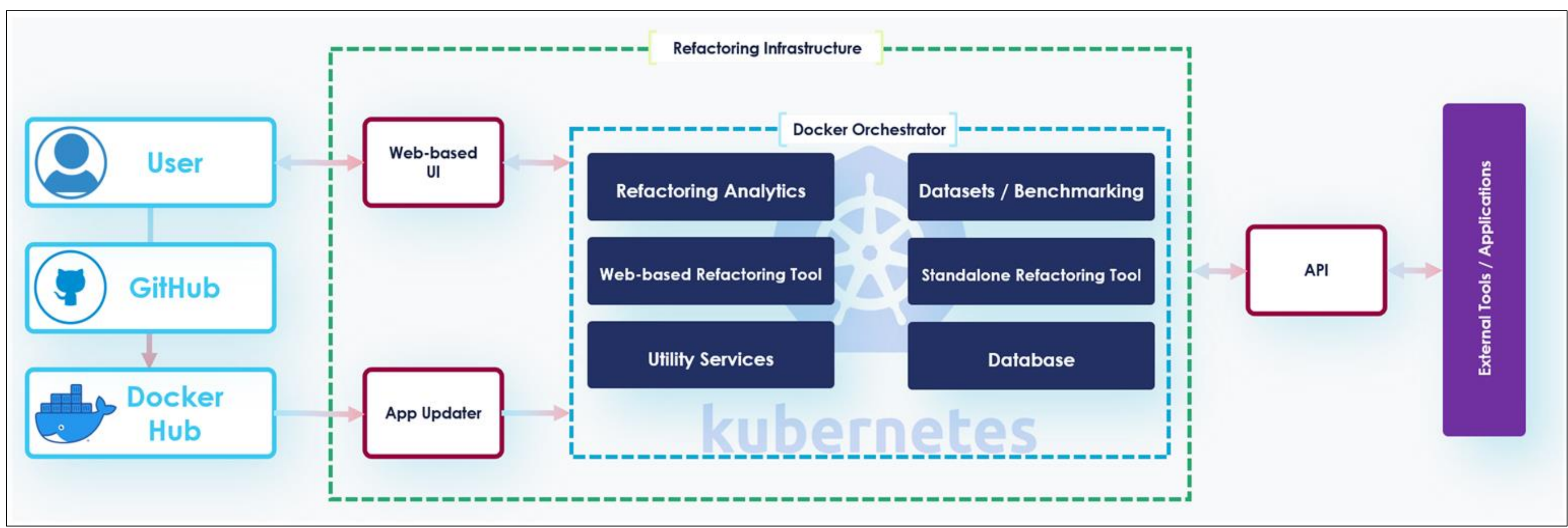
Refactoring Infrastructure Needs



Initial Version of RefBot



Refactoring Infrastructure Overview



Project Management Plan

Milest.	Tasks	Y1				Y2				Y3							
		1	2	3	4	1	2	3	4	1	2	3	4				
Data Support	Data collection of refactoring opportunities, detection, and recommendations data on thousands of software projects	█															
	Design and Implementation of a dashboard prototype for data sharing including sanitization, fairness, and modeling commons of the collected refactoring data	█															
	Implementation of an API to allow the refactoring community to easily upload datasets, refactoring teaching examples/tutorials, tools, and publications	█															
Features Support	Adapt and re-implement several refactoring tools, from papers and repositories, as services in the cloud (e.g. Docker images/containers) connected to GitHub	█															
	Integrate and orchestrate (based on Kubernetes) multiple tools covering the whole lifecycle of refactoring by automatically transforming the inputs and outputs of existing tools into generic data processing formats	█															
	Generalize the refactoring support beyond the main programming language used in refactoring research (i.e., Java) via the implementation of multiple language adapters to support other data science languages	█															
Testing and Mgmt.	Release	█															
	Testing	█															
	Documentation	█															
Commun. Building	Workshops and Tutorials	█															
	Identify and run Pilot Projects	█															
	Community developers	█															
	Recruit Advisory Board Members	█															