

Introdução à Engenharia
de Software – 2023/24
P4, G1



KeyUsageProfiler

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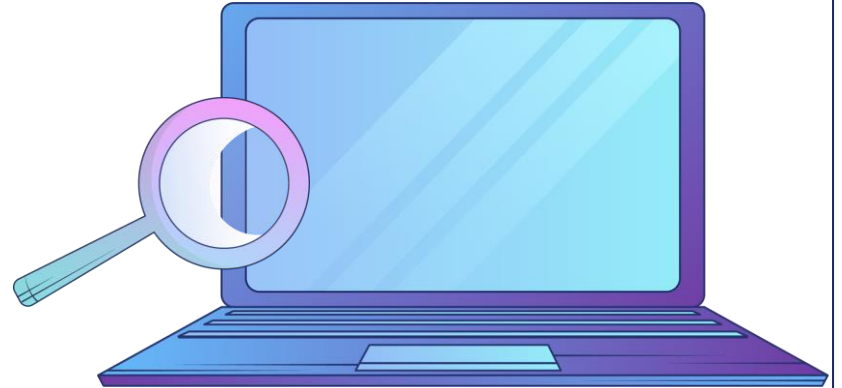


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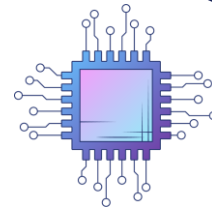
Product Concept

- 01** **Track User Keystrokes**
- 02** **Team Development**
- 03** **Self-evaluation Tool**
- 04** **Present Statistics**
- 05** **Inactivity/Gaming Notifications**
- 06** **Interaction with the user through a Web Interface**



Backlog Management

Feature-branching workflow



1. 16 stories implemented

1. Proposed to do **enhancement** user stories
2. Stories with the tag **idea** were secondary to the core concept of the product
3. Dropped #12 for #68 as it was more relevant according to the product requirements

2. Creation of branches and development based on features and division between backend and frontend (usually one developer for frontend and other for backend)

3. Conventional commit messages (Feat, Fix, Chore)

Title	Assignee	Status	Priority	Linked pull requests	Labels
1 Last pressed keys #68	ni	Done	Medium	#69	backend enhancement frontend keyboard representation
2 Key Heatmap #1	ni	Done	High	#66 #67 #73	backend enhancement frontend keyboard representation
3 Leaderboards #3	ri	Done	Medium	#62	backend enhancement frontend statistics
4 Activity Analysis #4	N	Done	Low	#70	alarms backend enhancement frontend statistics
5 Dashboard Members Selection #5	m	Done	Medium	#65	enhancement frontend statistics
6 Reset Team Statistics #16		Backlog			backend frontend idea statistics
7 Reset Statistics Periodically #17		Backlog			backend frontend idea statistics
8 Leaderboard Permissions #11		Backlog			backend frontend idea
9 Estimation of IDE or editor #12		Backlog	Low		backend enhancement frontend
10 Live Virtual Keyboard #8	ni	Done	Medium	#42 #45 #59	backend enhancement frontend keyboard representation
11 Delete Team #18	N	Done	Medium	#41 #58 #59	backend enhancement frontend team management
12 Inactivity Notification #19	N	Done	High	#37 #59 #70	alarms backend enhancement frontend
13 Leave current team #15	N	Done	Medium	#41 #59	backend enhancement frontend team management
14 Remove team member from team #13	h	Done	Medium	#41 #59	backend enhancement frontend team management
15 Become part of a Team #9	N	Done	High	#41 #56 #59	backend enhancement frontend team management
16 Invite Team Members #7	h	Done	High	#41 #59	backend enhancement frontend team management
17 User Profile Statistics #2		Done	High	#31 #71 #73	backend enhancement frontend statistics
18 User Registration #6	n	Done	Urgent	#35 #59	authentication backend enhancement frontend
19 User Login #10		Done	Urgent	#35 #59	authentication backend enhancement frontend
20 Create Team #14	n	Done	High	#36 #59	backend enhancement frontend team management

Architecture

Keylogger

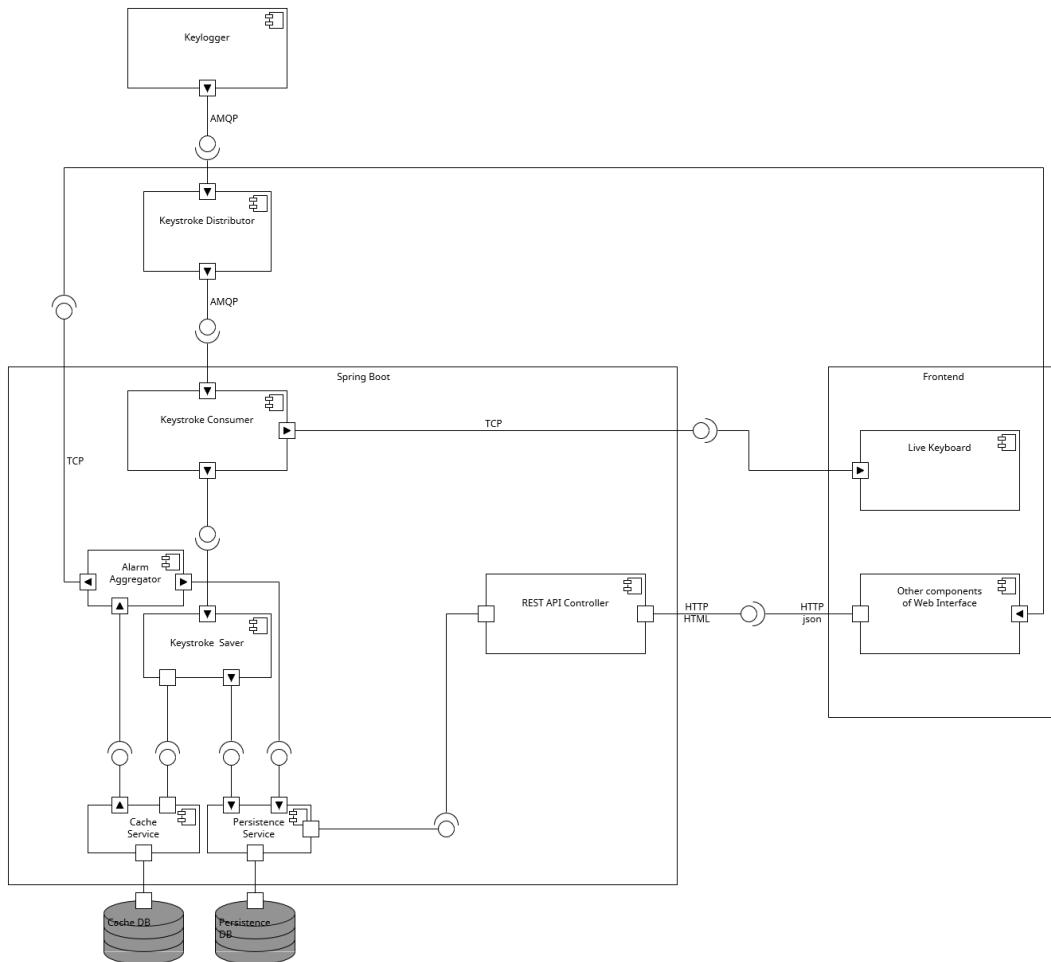
Registers keystrokes (presses and releases) and sends them to a message queue that is consumed by **Keystroke Consumer**

KeystrokeSaver

Responsible for **interconnecting** and consuming the database services.

Alarm Aggregator

Responsible for **handling** key expired event and send the generated notification through the appropriate channels.



DevOps



Granted support for version control and code history that facilitated the branching and merging during the parallel development process.



Enabled the hosting of the Git repository, together with the ability to create issues, pull requests and the management board (GitHub Projects).

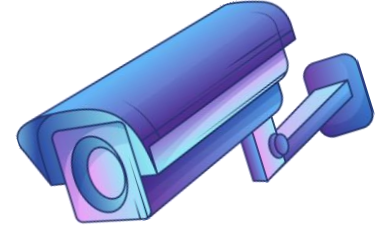


Granted support for build automation, dependency management and a standardized project structure.



Granted the encapsulation of the various parts of the application along with its dependencies and ensured consistency during deployment and development.

Demo



○ Deployed

Deployed in our IES server

○ Showcase

Multiple computers sending different keystrokes to different teams **at the same time**.



Thanks!

Do you have any questions?

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