User Manual

Instructions for Launching the Program:
To use the following commands, you should have "Apache Ant" installed beforehand. If Ant is already installed, you need to open a terminal in the directory that contains the "build.xml" file.

Once in the terminal, you can execute 4 commands with Ant:
➜ "ant compile": This command is used to compile the various game files; after this, the "classes" file will be populated.
➜ "ant jar": This command is used to generate the "baba.jar" jar file, which can be launched later. You can use this command without compiling; it is done automatically.
➜ "ant javadoc": This command is used to generate the Javadoc.
➜ "ant clean": This command is used to delete all files generated by the previous commands.

To launch the "baba.jar" file, you just need to be in the same directory as the file, open a terminal, and execute the command "java -jar baba.jar." This will generate the default level.

If this command is used, the game will stop if the victory or defeat conditions are met. In that case, there will be a display indicating whether there is a victory or defeat in the terminal.

Usage and Rules of the Game:
Names: baba, wall, rock, water, lava, flag, skull, grass, tile, flower, brick, jojo.
Operators: is.
Properties: you, win, defeat, stop, sink, melt, hot, push, breaker.
Characteristics of the Properties:
• **You**: Allows the associated element to be moved.
• **Win**: Corresponds to the element where, when an element with "You" is in the same position, the game is won.
• **Stop**: Corresponds to the element that cannot be passed through.
• **Sink**: Corresponds to the element that is destroyed upon contact with another element and destroys the other element.
• **Hot**: Corresponds to the element that emits heat.
• **Melt**: Corresponds to the element that is destroyed if it encounters an element with the "Hot" property.
• **Push**: Corresponds to the element that can be pushed.
• **Defeat**: Corresponds to the element that kills the "You" element.

• **Breaker**: Corresponds to the element that can destroy an obstacle preventing its progress (can only be associated with an element linked to "You").

Elements associated with "You" can be moved using the arrow keys.
Text blocks are pushable by default.

The game rules are formed by the text blocks present in the level. A rule consists of a name followed by an operator and then a property (a rule can be formed horizontally and/or vertically).

You can modify the game rules by changing the arrangement of the text blocks, and a name can have multiple properties.

Names not associated with a property can be passed through.
If no name is associated with the "You" property, the game is lost.
To win, you only need to have an element associated with "You" in the same position as an element associated with "Win."

Instructions on Game Controls:
The game can also be launched using other commands, such as:

"**java -jar baba.jar --level chosenLevel**": This will launch the chosen level. The "levels" file contains all the levels that can be played. For example, to launch "level1.txt," replace "chosenLevel" with "level1."

"**java -jar baba.jar --levels folderName**": This allows you to start from the first level in the specified folder, and upon winning, the game generates the next level. In this version, there is only one available folder, which is "levels".

If "--level" or "--levels" are used without specifying a file (--level) or a folder (--levels), it will launch the default level.

You can configure a chosen level with the "--level" command using the "--execute" command. For example: "java -jar baba.jar –level chosenLevel –execute WALL IS YOU" will generate the chosen level with walls as controllable elements.

You can combine multiple "--execute" commands in sequence. For example: "java -jar baba.jar –level chosenLevel –execute WALL IS ROCK --execute ROCK IS YOU."

If no element has the "You" property when using this command, the elements

defined in the chosen level will have this property.

The words used to create rules must be written in uppercase.

If the "--execute" command is used, the entered rules cannot be changed during the game. Therefore, you cannot create rules using text blocks if you launch a level with this command.