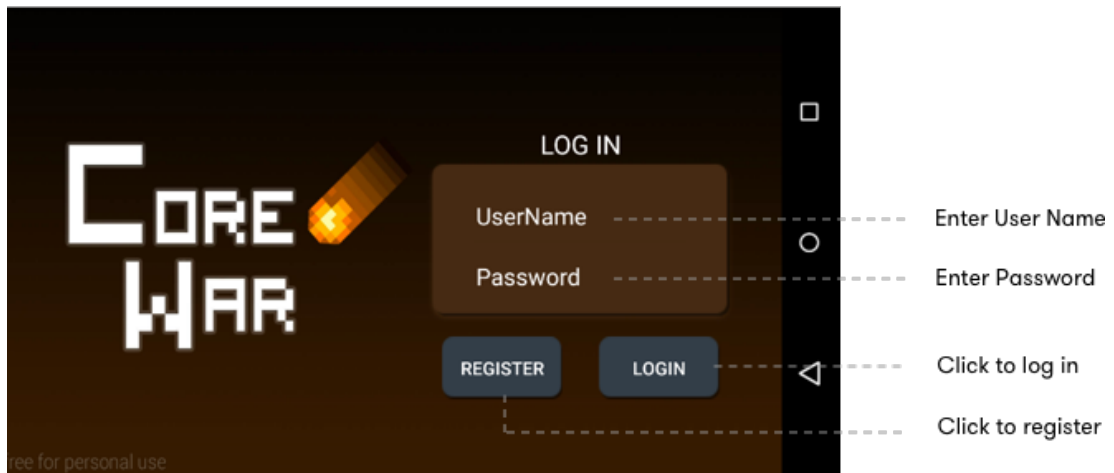
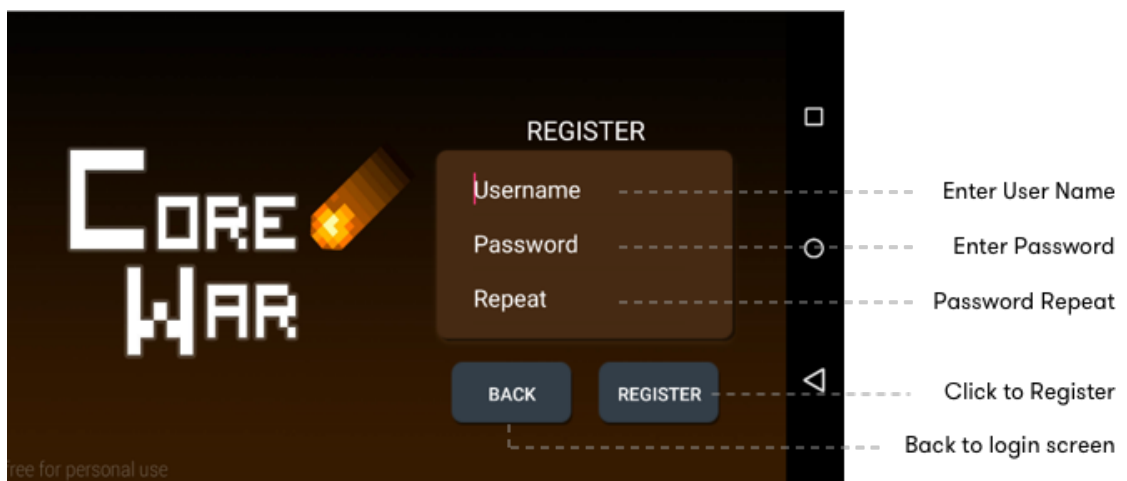


User Interface

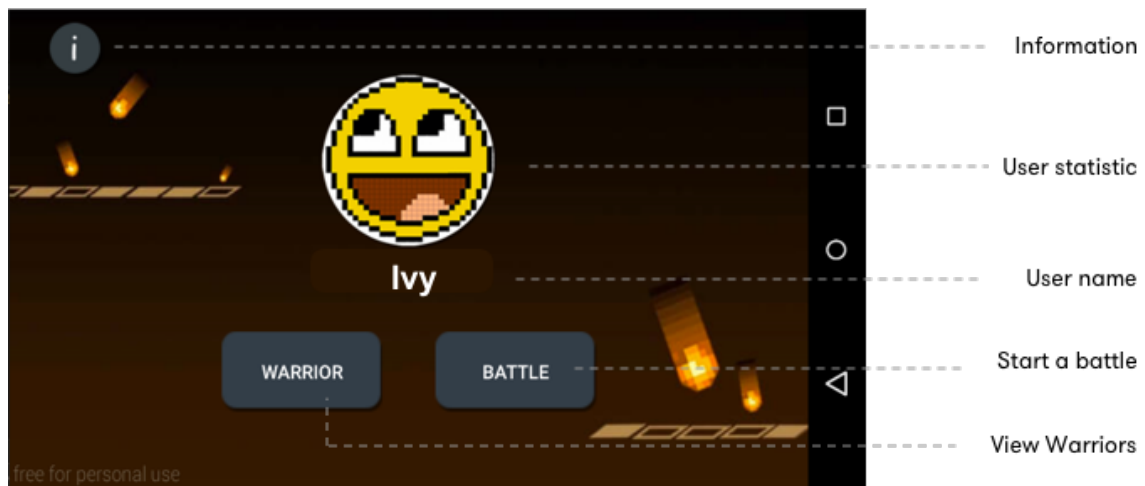
1. **Log-in Screen** – This screen allows the user to log-in if they have already got a username and password, or go register if not.



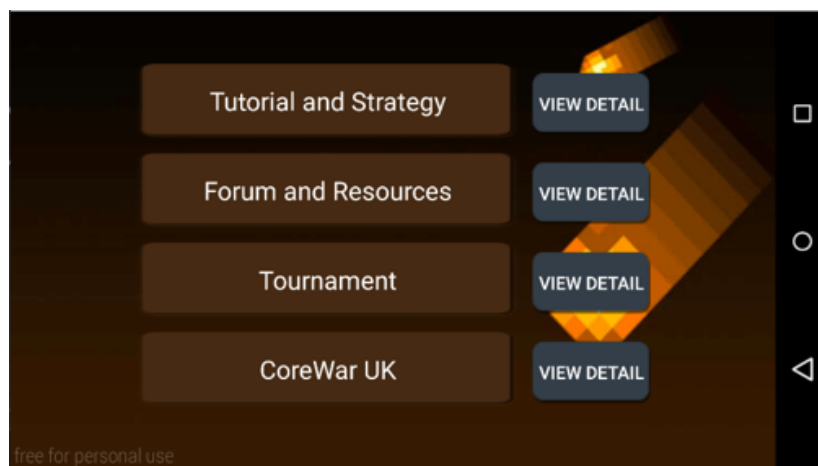
2. **Register Screen** - Allows the user to register a new account



3. **Home Screen** – This screen is reached after the user has logged in, and it also serves as the screen that is shown after a battle.



4. **Information Screen** – This screen provides general information about Core war from four different areas, each of which are linked to one website where related information can be found.



- a. Tutorial and Stratetegy ⁱ
- b. Forum and Resourcesⁱⁱ
- c. Tournamentⁱⁱⁱ
- d. CoreWar UK^{iv}

Starting with Redcode

The Redcode instruction set

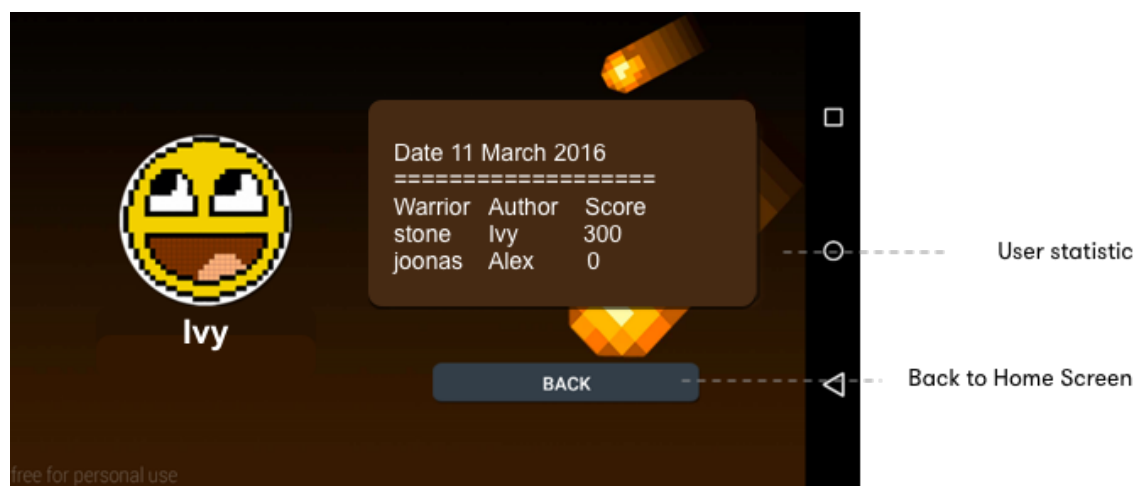
The number of instructions in Redcode has grown with each new standard, from the original number of about 5 to the current 18 or 19. And this doesn't even include the new modifiers and addressing modes that allow literally hundreds of combinations. Luckily, we don't need to learn all the combinations. It is enough to remember the instructions, and how the modifiers change them.

Here is a list of all the instructions used in Redcode:

- **DAT** – data (kills the process)
- **MOV** – move (copies data from one address to another)
- **ADD** – add (adds one number to another)
- **SUB** – subtract (subtracts one number from another)
- **MUL** – multiply (multiplies one number with another)
- **DIV** – divide (divides one number with another)
- **MOD** – modulus (divides one number with another and gives the remainder)

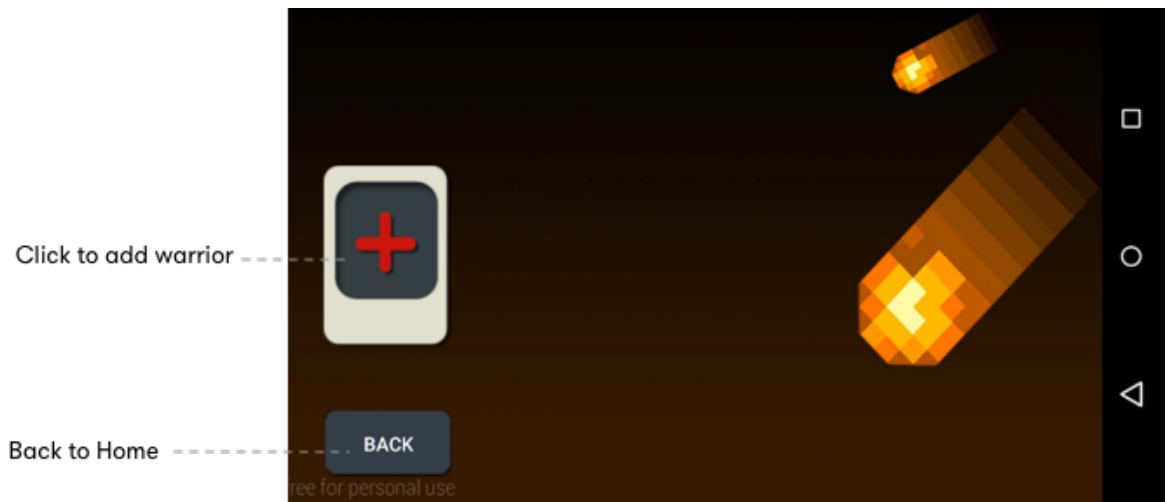
One of the websites linked

5. **Statistic Screen** – Contains all multiplayer mode battle records. Information consists of: game date, warriors' names, authors of warriors and the score they achieved. This is a scroll view of multiple battles that have been played.

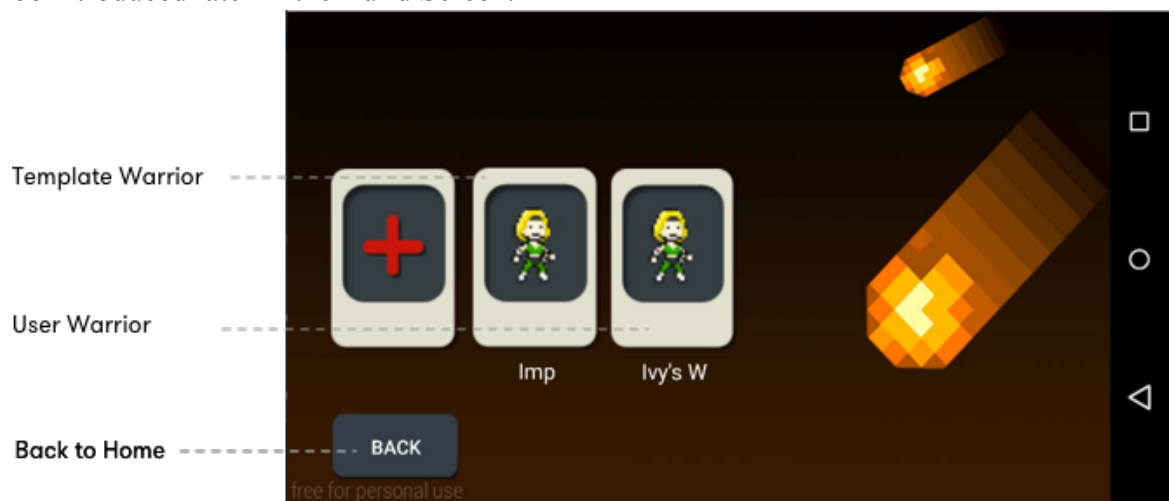


6. **Warrior Screen** - A warrior container that consists of all the warriors owned by the user. “Warrior Cards” are used to represent warriors, which are essentially character images with the names of the warriors underneath. Users are allowed to add, remove and select warriors whilst in non-battle mode. However, functions of the Warrior Screen will change once in battle mode, which will be introduced in **Battle Screen**.

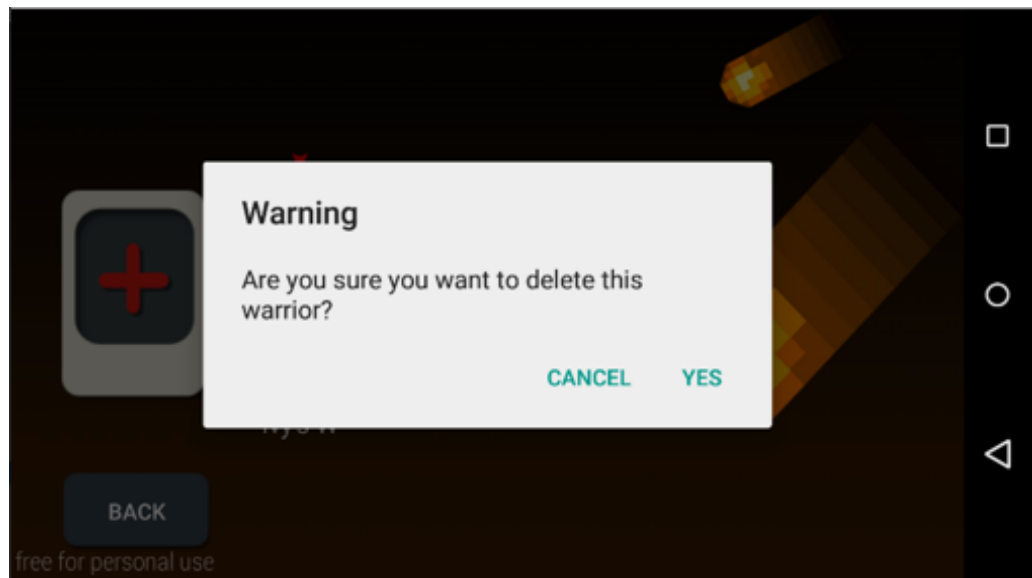
Add : The initial state of the Warrior Screen consists of only an “Add Card” button.



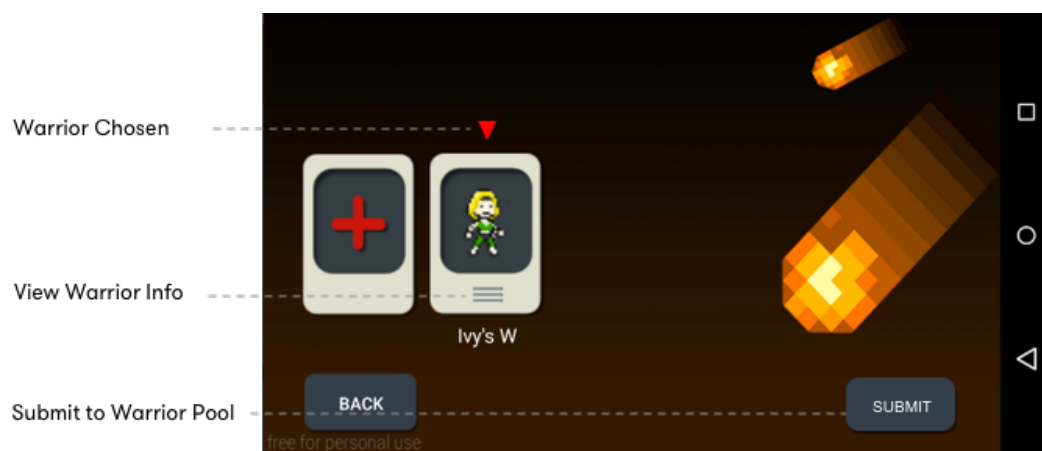
Warriors from “Template” or “Create New” warriors can be added. These will be introduced later in the Build Screen.



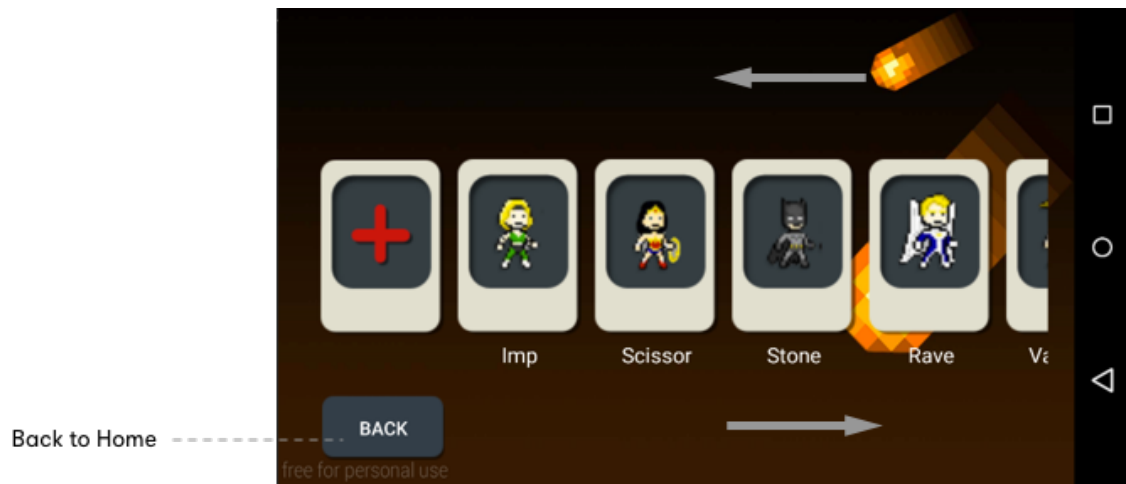
Delete: Long clicking on one warrior card will cause a warning as shown below. If “yes” is chosen, this warrior will be removed from the warrior container.



Select: Warrior cards can be selected. When the warrior is selected, a small red arrow will appear above the warrior card as well as three short horizontal lines within. These lines link to the **Information Screen** and allows users to view detailed information about chosen warrior or add their own. Also you can submit the selected warrior to **Warrior Pool**, which will be introduced later.

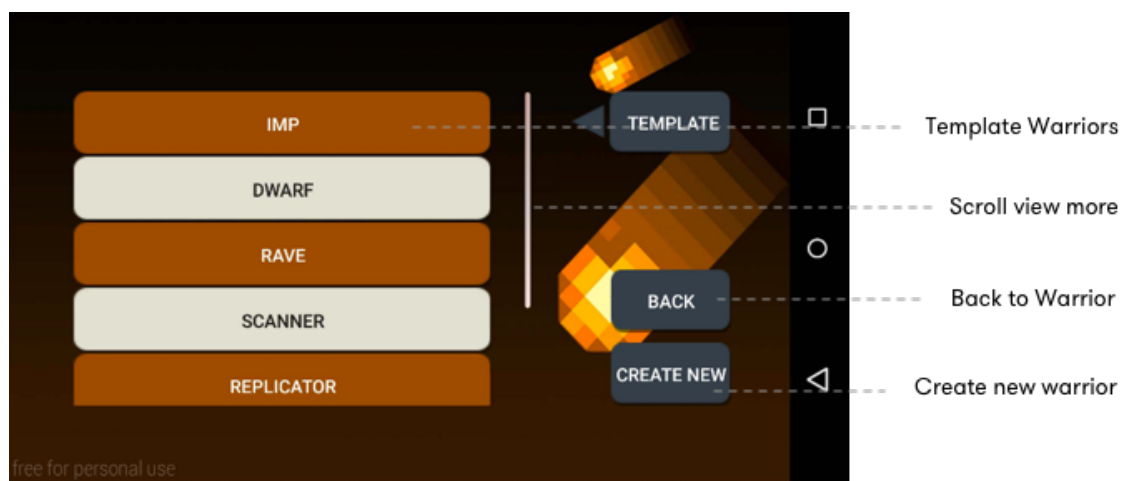


Store More Warriors: As the number of the warriors becomes larger, warrior cards may go off the screen. They can be viewed by using left/right swipe gestures.

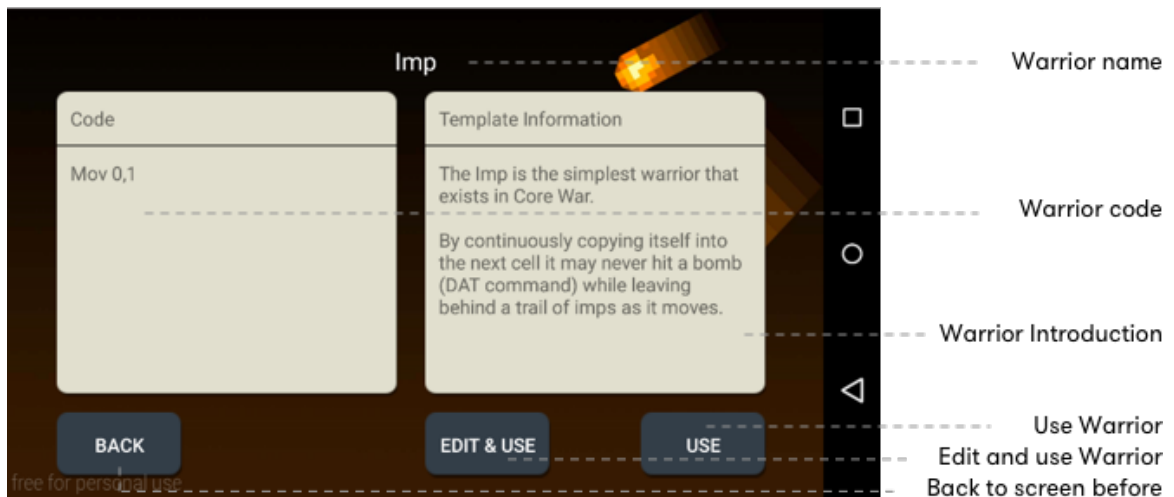


This screen will be

7. **Build Screen** - The user can choose to use template warriors or create one of their own. Template warriors are pre-defined warriors with the aim of helping new players get a taste of the game and also study some code.



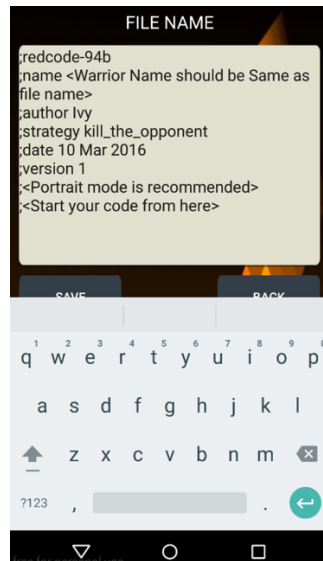
8. **Warrior Detail Screen** - Displays the details of the warrior, including: warriors name, code and strategy information. The warrior information is mainly about how the warriors move or act as well as its potential advantages and disadvantages. Template warriors will be loaded into the Warrior Screen if they are used.



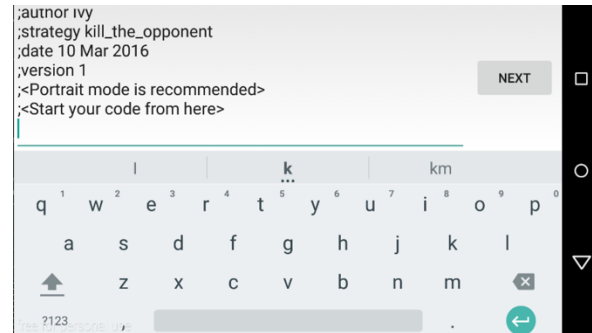
9. **Warrior Editor** - The editor screen for stored warriors. This screen consists of: a file hint (for the compiler); the warriors name, author, strategy, date and revision; and the code for the warrior itself. Upon saving the file, it may be viewed again from the **Warrior Screen**.



While both portrait and landscape modes are feasible, portrait mode is recommended to prevent excessive cluttering on the screen.

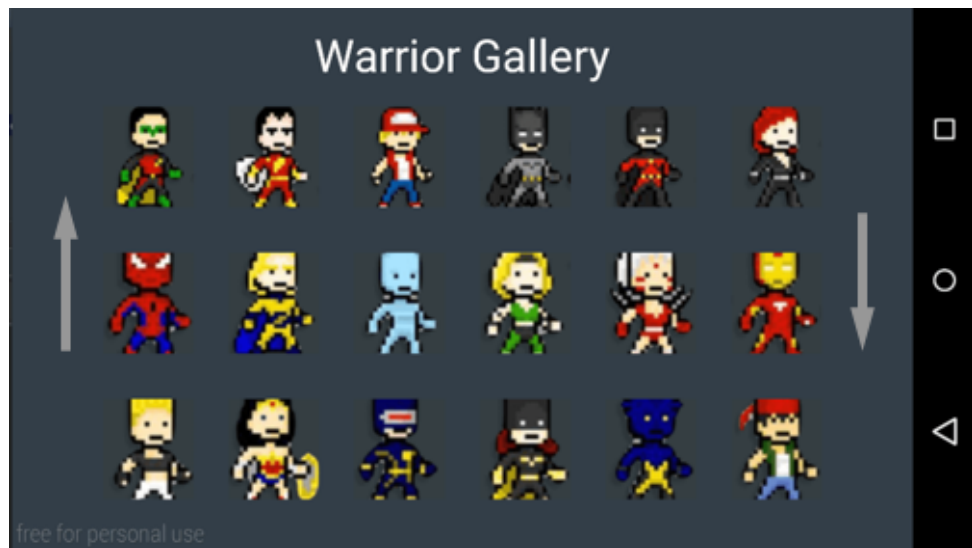


Portrait Mode

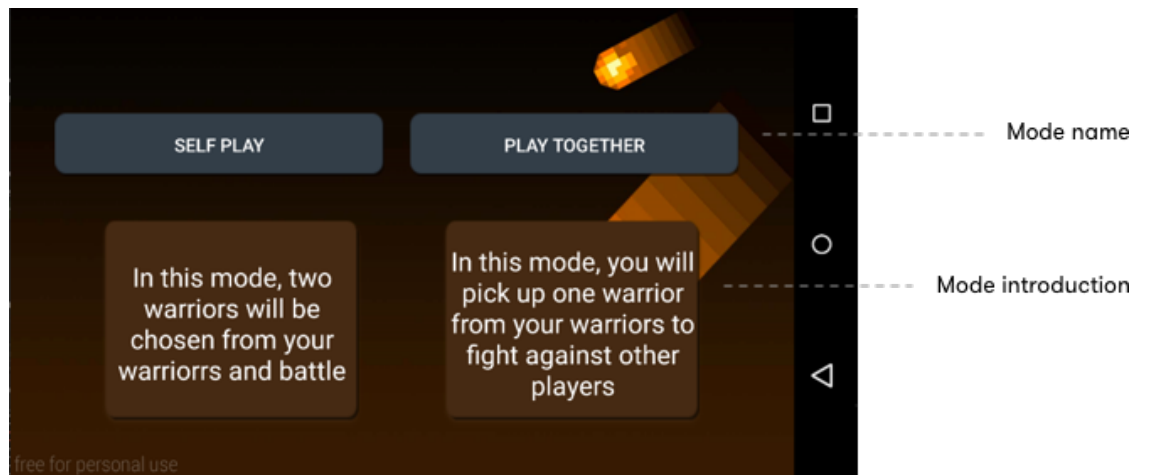


Landscape Mode

Warrior Gallery – Choose a character image to represent your warrior from the gallery after creating a new warrior. 30 choices are offered to build customized Warriors.

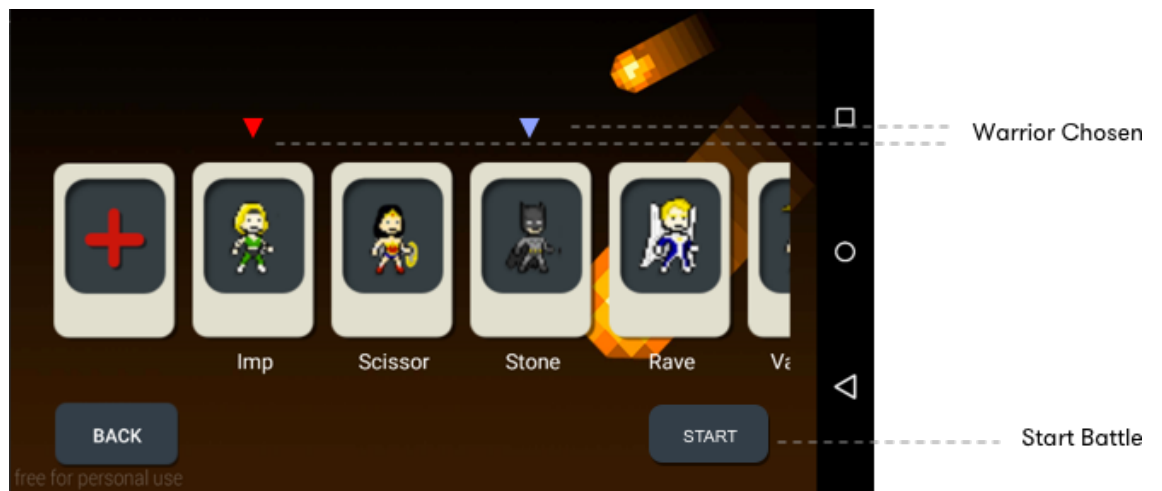


10. **Battle Screen** - Presents the user with single and multiplayer mode buttons:

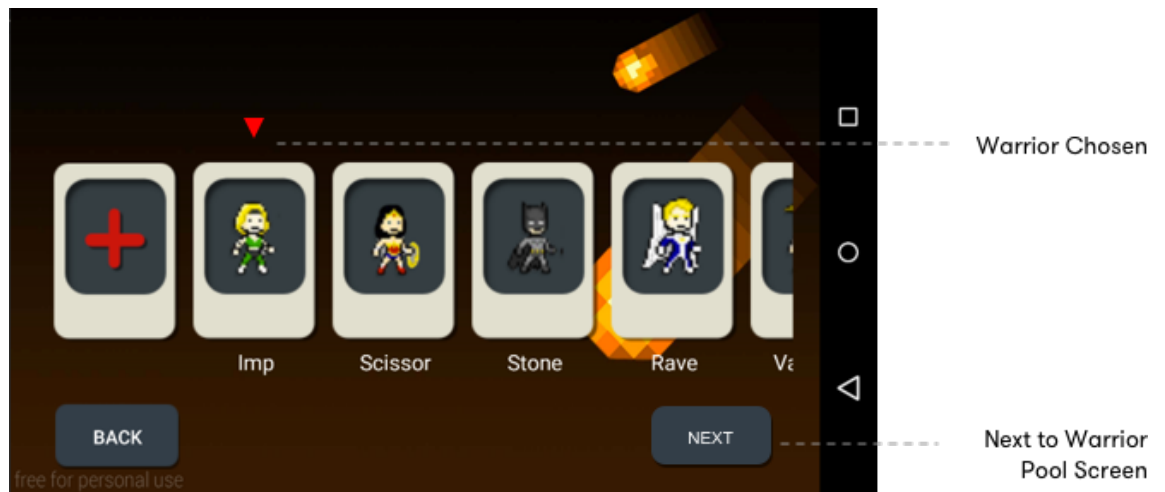


Warrior Screen will be implemented in different ways depending on the mode chose by the player. Functionalities such as adding, deleting, viewing detail of warriors are not available under battle mode.

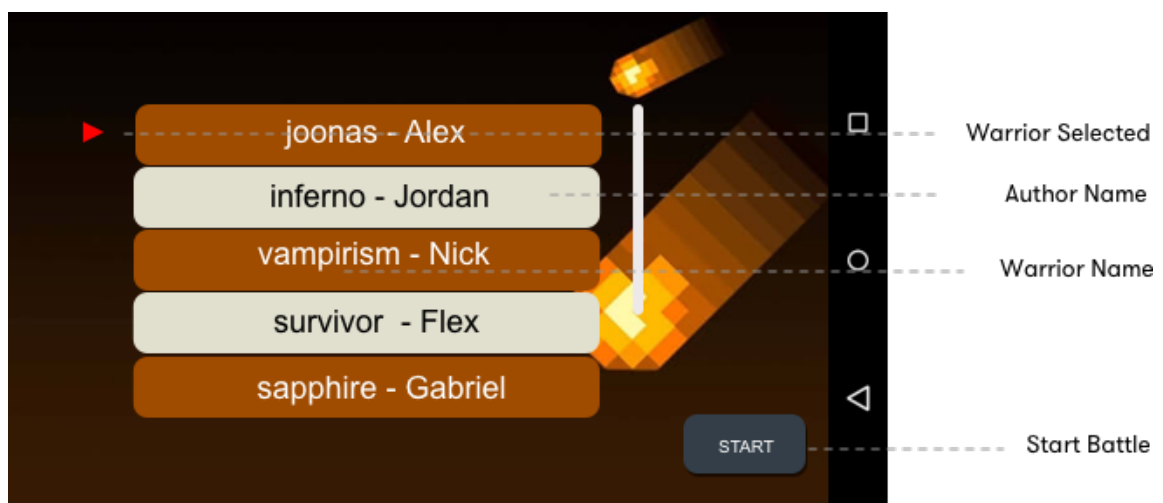
- Self-play mode: The player chooses two warriors of their own and runs them against one another.



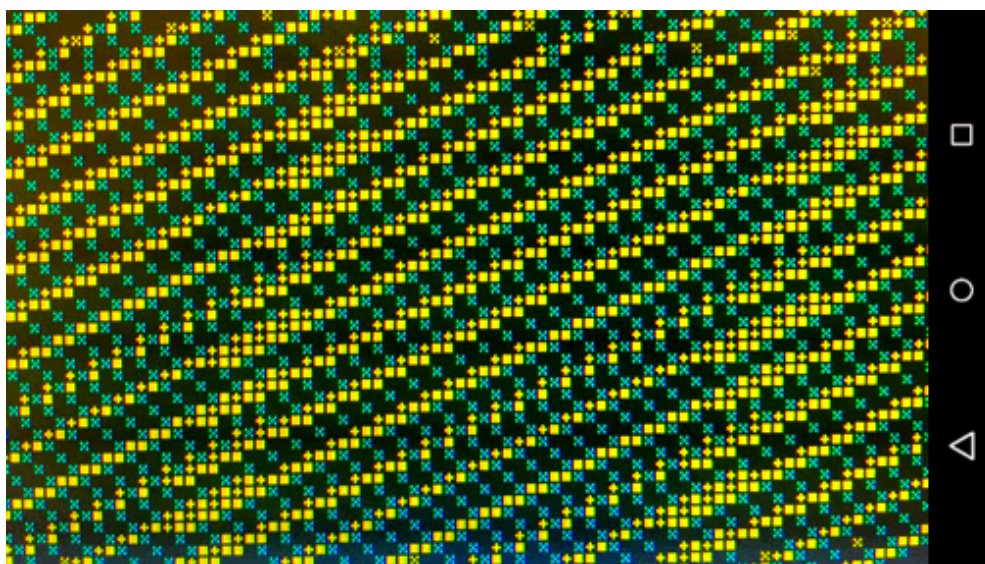
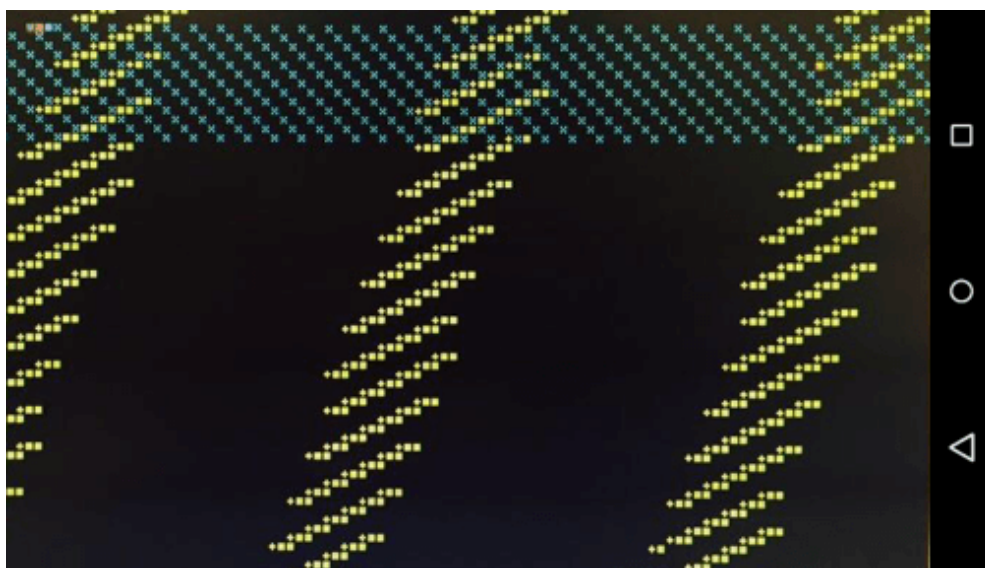
- Play-together mode: The user chooses one of their warriors and another warrior which has been uploaded by other players from the Warrior Pool, see introduction next. These two warriors then fight, resulting in a win/loss record to the respective players.



11. Warrior Pool Screen - Contains all the warriors uploaded by all the game players[M11]. Click on the list with warrior name and author name on and choose one warrior to fight against. Click Start button to start battle.



12. Result Screen –Display the animation which showing how two warriors battled, and give the result when the battle terminated. Following is two screen shots of the animation running the battle between two warriors named stone and joonas. Result are displayed including warrior name, author of the warrior, the score warrior got in the battle.



ⁱ <http://vyznev.net/corewar/guide.html#starting>

ⁱⁱ <http://corewar.eu/forum/>

ⁱⁱⁱ <http://sal.discontinuity.info/>

^{iv} <http://corewar.co.uk/index.htm>