mORCA: Ubiquitous access to life science Web Services

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\textbf{mORCA}

State-of-the-art apps

http://chirimoyo.ac.uma.es/morca/app

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| Category | App name | Performe | Advantages | Disadvantages | Link |
|----------|----------|----------|------------|---------------|------|
| 1 | Phylotram | Visualization of phylogenetic tree structure | Phylogram allows visualization of the phylogenetic trees resulting from bioinformatics sequence analyses | Phylotram can be used for students research and education, but it is not suitable for research. | https://itunes.apple.com/us/app/phylotram/id528862051?mt=8 |
| 2 | Biocatologue | Browse the catalogue for services, service providers, REST endpoints and GCX Operations | Informational app, handles landscape and portrait. Free | Biocatologue is a useful tool for researchers, but it is not suitable for educational purposes. | https://play.google.com/store/apps/details?id=com.biocatologue |
### 2. Comparison table

| Multiplatform | No. Different services | Property/Free | File management |
|---------------|------------------------|---------------|----------------|
| mOrca         | Yes                    | No limits     | Free           | Local/Remote   |
| Phylogram     | No                     | 1             | Free           | Local          |
| Biocatalogue  | Yes                    | 0             | Free           | Remote         |
| SimAlign      | Yes                    | 1             | Free           | Local/Remote   |
| SimGene       | Yes                    | 6             | Free           | Remote         |
| Oh BLAST It!  | No                     | 1             | Free           | Local          |
| Gene Aligner  | No                     | 1             | Free           | Local          |
| DNAApp        | No                     | 5             | Free           | Local/Remote   |

This table includes the differences between some of the most relevant apps in the stores and their main functionalities. Being multiplatform is a double-edge characteristic because, as described in the manuscript, native apps are usually faster but restricted to one platform while hybrid apps are usually slower but can be executed in several platforms. The mORCA's main strength is to be capable of executing a large number of services while others are specifically designed to run specific software or a small amount of them. Furthermore, local or cloud file management is also an important feature in mobile devices due to capacity limits.

**Legend**
- **Multiplatform**: It can be executed in, at least, two different platforms (Android, iOS, Windows Phone, Linux…)
- **No. different services**: that can be executed from the application. Each service provides different functionality (i.e., Blast, clustal, etc.)
- **File management**: Local or remote file saving/reading