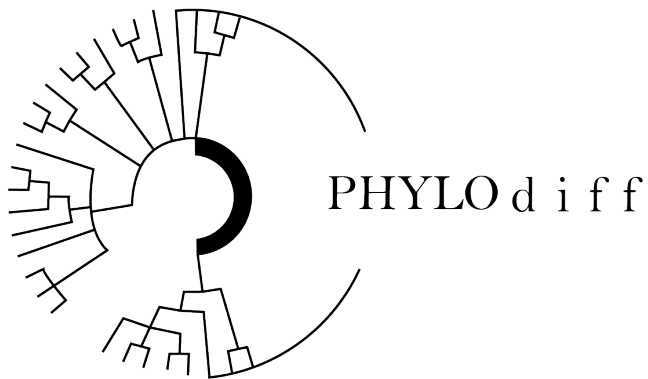




**ISEL**  
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Descrição da organização do projeto realizado no âmbito de Projeto e Seminário  
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## Project's repository

The project's repository can be found [here](#). It currently has public access, but if for some reason you do not have access to the repository, please send an e-mail to [a47262@alunos.isel.pt](mailto:a47262@alunos.isel.pt) or [a47218@alunos.isel.pt](mailto:a47218@alunos.isel.pt) with your GitHub username so that the project members can add you to the private repository.

## Required tools

To be able to run and test PhyloDiff in your computer, you simply need to have NodeJS installed and an integrated development environment, like [WebStorm](#) is recommended to view the project's code and to run it.

## How to run our project

Firstly, open a terminal inside the project's directory and type in the commands `npm start` and then `npm run-script build` to compile our project's code. After that, to run our app, inside the `phylodiff/Examples/Website` directory there's an HTML script called `phyloio.html`. Simply drag this file to your browser to run our web application. If you're using WebStorm, press the 'Run phyloio.html' button to open the Web App will on the browser. If you want to test our application with the trees we used to make our tests, they can be found in the `phylodiff/trees` folder.

## How to add new comparison measures to our library

To add new comparison measures to our library, simply head over to the file available at `phylodiff/metric/_modules/lookup-test.js` and push an object with the following structure into our metrics array. Mandatory parameters are marked with a \*:

```
{
  /** -> short name of the metric
  name: EUC,
  /**-> the full name of the metric
  full_name: Euclidian,
  /** -> the function that will compute the metric's result
  compute: compute_euc_dist,
  /** -> conditions in which the metric can be computed
  conditions: {
    'intersect': true,
    'included': false
  },
  /**-> the name and color limit values for the highlight associated to this metric
  highlight_settings: {
    label:"EUC",
    color_extent_min: 0,
    color_extent_max: 1
  },
  /**-> link to the original document/source of the metric
  ref:
```

```
        "https://en.wikipedia.org/wiki/Euclidean_distance"  
    }
```

## Project's organization

Inside our `phylodiff/src/` package are main of our backend files. `api.js` contains the function that computes our metric results (`compute_metrics`). Our `model.js` has the functions that return the sets of clusters that will then be used to compute the metrics' result. `utils.js` has functions that are used acrossed ourr entire project.