

EPOS GNSS Node management

Project Proposal, 2023

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1 Objectives

Within the context of EPOS, the European Plate Observing System, the GNSS and Geodesy Group supports and develops a distributed file management software installed at various sites (called Nodes) across Europe, including at the Collaboratory for Geosciences (C4G) site at the University of Beira Interior (<https://www.c4g-pt.eu/>). In this project a small web application will be developed in order to improvement the management and monitoring at these nodes. In particular a graphical application and system of alerts that reports on the status of the reception and processing of daily Rinex files. These are files that contain GNSS position observations collected at GNSS stations from institutions such as (in Portugal) the “Direção Regional de Ordenamento do Território” and the “Direccao de Servicos de Cartografia e Informacao Geografica.” The web application should be built using any one of the popular front end development frameworks (such as Angular, VueJS, React for NodeJS and Django for Python)

2 Tasks

T1 Study of the existing System. (0,5 month)

T2 Requirements Specifications. (0,5 month)

T3 Software’s and Technologies. (0,5 month)

T4 Development of the Soluton. (1.5 Months)

T5 Testing and Validation. 0,5 month

T6 Project Write-up. 0,5 month

3 Technical and Academic Requirements

Network and Distributed Programming. SQL Databases. Java Programming Language. Software Engineering.

4 Expected Results

- 1 Project Software
- 1 Report.

5 Contacts

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