

CTA Proposal Handling Platform



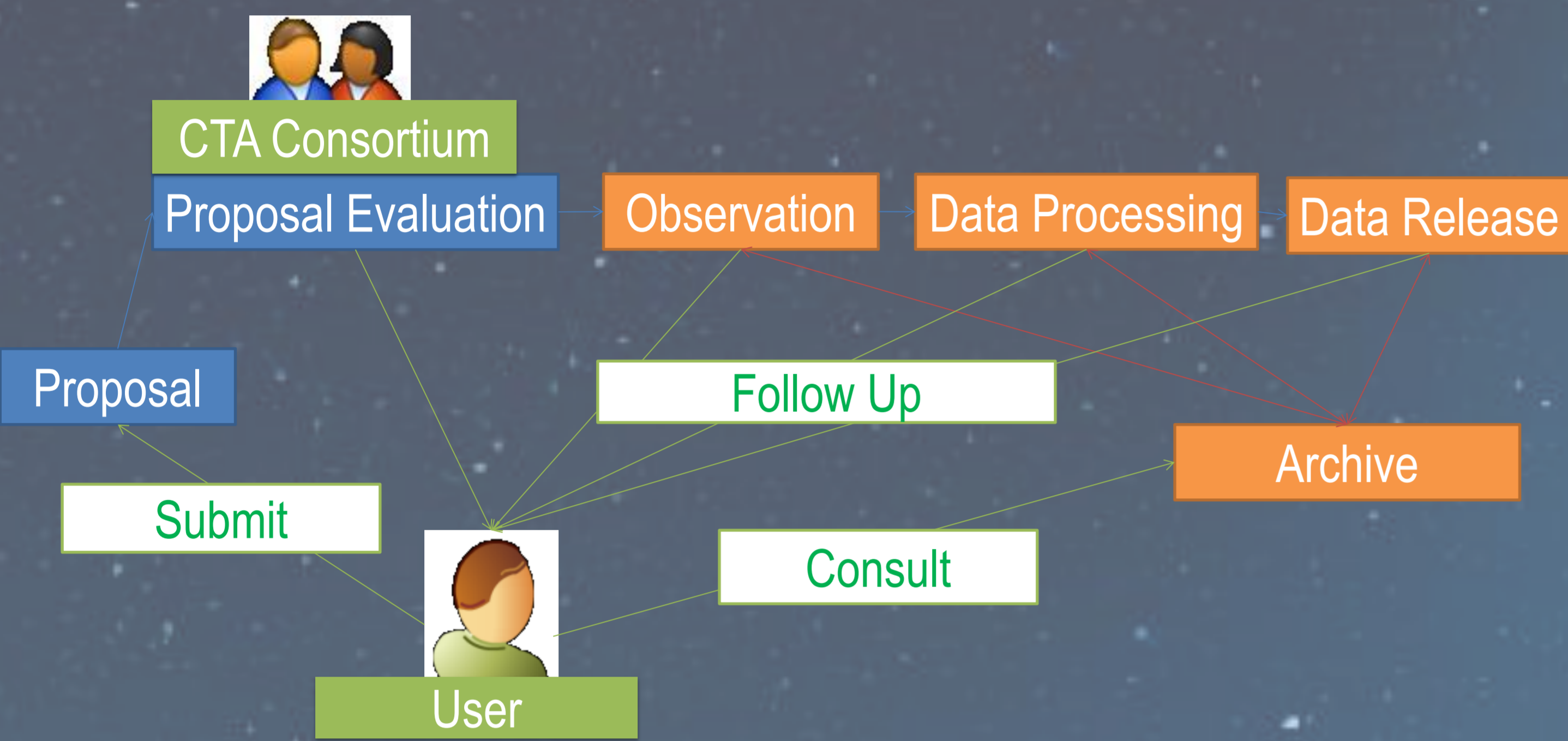
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CTA Project

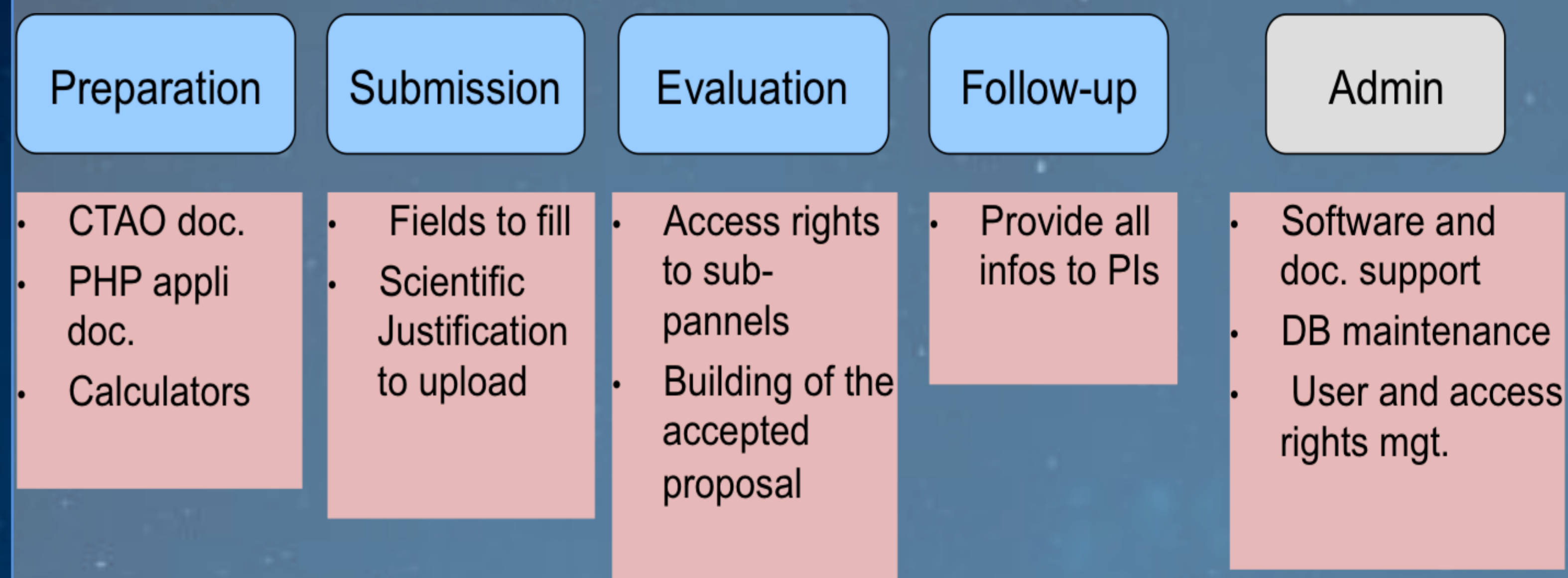
The CTA project, Cherenkov Telescope Array, aims to build and run an astronomical observatory to observe the very high energy sky in gamma-rays at energies larger than 20 GeV. It consists in the construction of about 100 telescopes, using the technique of Imaging Atmospheric Cherenkov Telescopes, split over 2 sites, La Palma in the Canaries Islands and the Atacama desert in Chile. The construction already started and the array should be completed by 2021.

As an observatory open to the astrophysics community, a call for proposals for observations at CTA will be issued each year. These proposals will be subsequently ranked by an International Observing Program Committee and its panel, based on astrophysical and technical criteria. The CTA consortium has chosen a django web-based interface to manage the proposals, from the announcement of the call to the proposal selection. The main CTA web portal will be the entrance door for the proposal application, called *Proposal Handling Platform* (PHP). This poster describes the CTA PHP synopsis and features, its resources in back-end and examples of its front-end web pages, and the underlying Data Model for the proposals as well as the used implementation to manage the data.

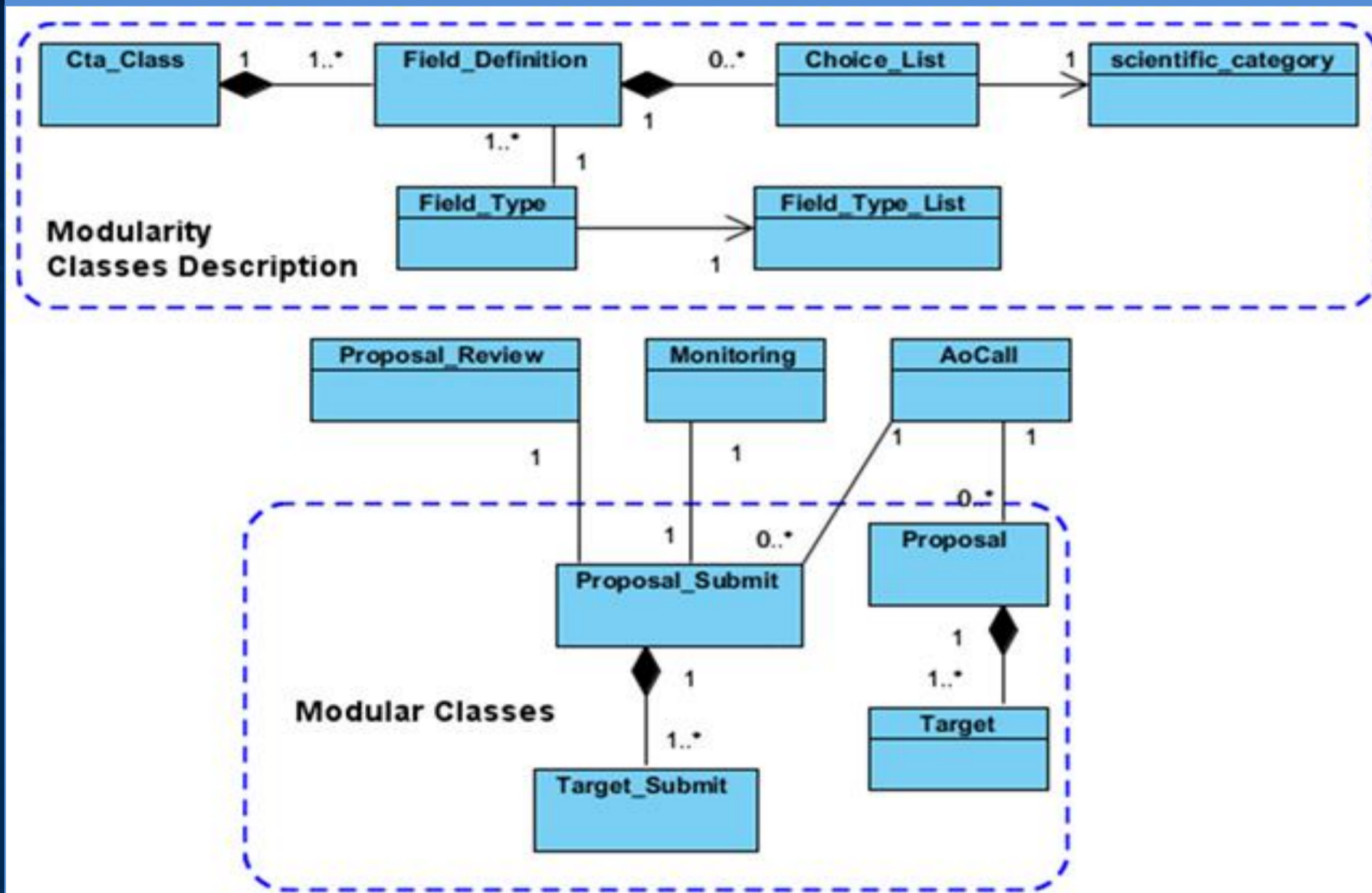
Observations Proposal Synopsis



CTA PHP Features

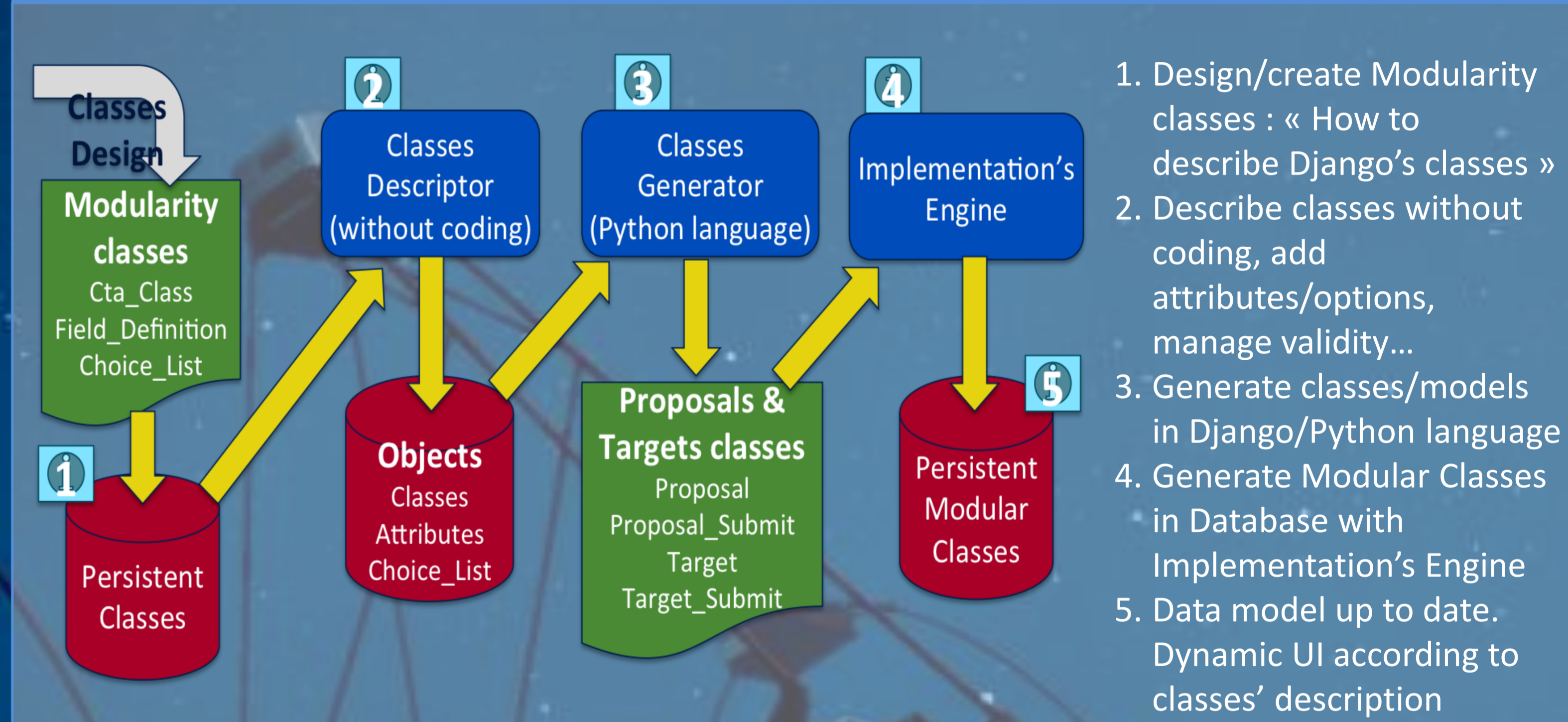


Data Model



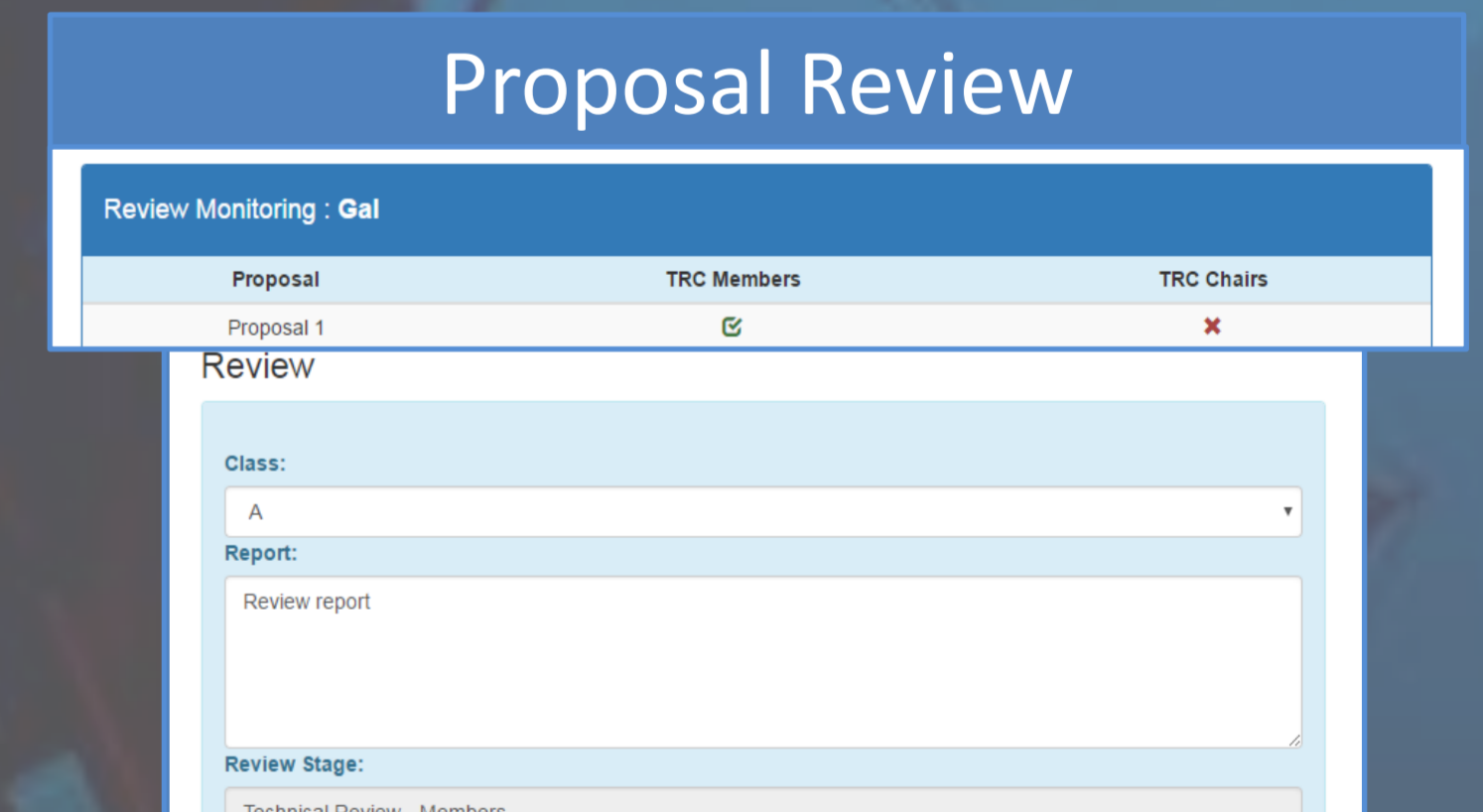
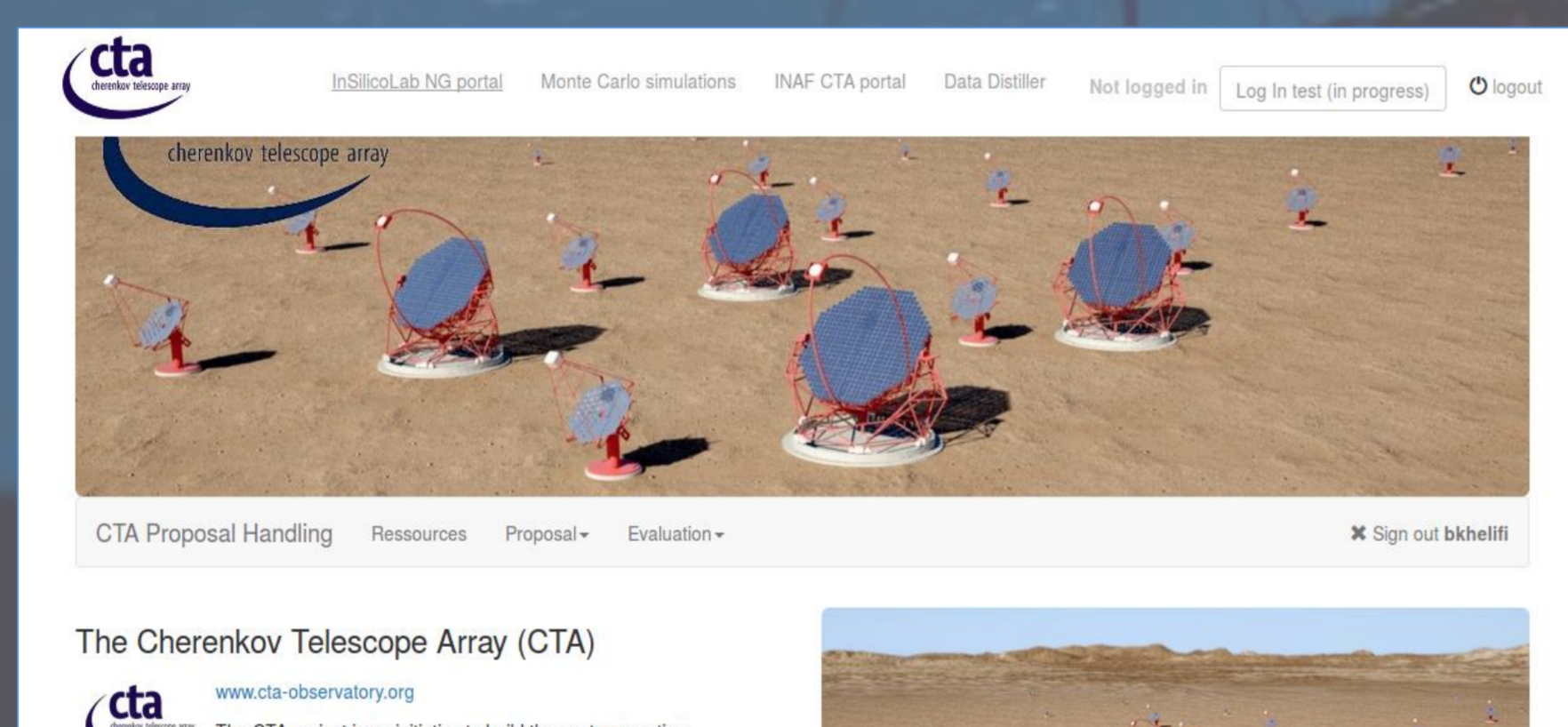
An observer submits a Proposal to perform a set of observations. A proposal contains the description of observing strategies and associated observing modes for the execution of a target. Data management is based on a complex but very flexible datamodel implementing modularity feature.

Modularity

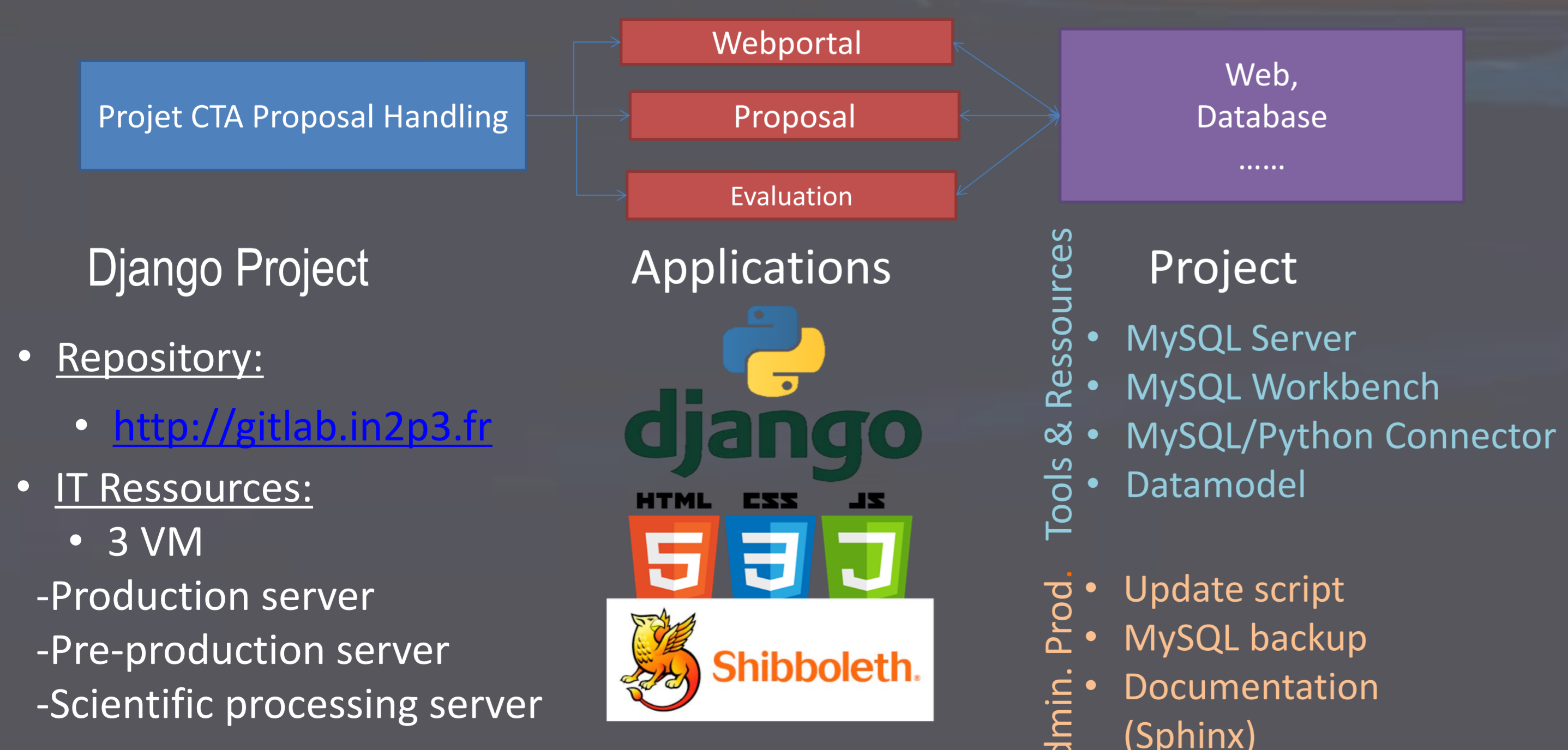


CTA PHP Dashboard

Restrictive and various dashboards for each PHP feature.



Resources



The CTA Science gateway based on Authorization & Authentication (A&A) system is used to identify a CTA user.

Conclusion

The Proposal Handling Platform (PHP) developed by the APC team is an official software of the CTA consortium. The development phase is close to completion with the delivery of the V1 version. The V2 version will be delivered at the end of 2018. The main features of this web application rely on open-source software, the web server, development languages and data bases. The strength of its architecture is the modularity of creating and using fields of the web form without creating a fixed data base or coding them in the web application function. For this reason, this platform can be opened to other scientific domains and for the final version it will be easily possible to integrate other types of observations according to the specific characteristics of an instrument. This aspect is of interest to Paris Diderot University for an electron microscope or other space projects (SVOM).