Project Description

Issue Statement:
The Time Allocation Committee (TAC) process is an important link in the chain of Gemini Observatory operations. It is the means by which a submitted proposal is given an allocation of time for observation and assigned a ranking band. The process begins with the submission of staff proposals to the Gemini Staff server and delivery of submitted proposals from the partner countries. It ends with the notification of accepted proposals and creation of Phase II skeletons. Phase 2 of the ITAC process will build upon the work already completed (and in-progress) on this product in order to more fully realize the stakeholder's original vision. It consists primarily of requirements identified in the phase 1 planning process as either less critical or too time-consuming for the original project constraints. Plan consists of iterations sequencing work in logical chunks approximately from most to least essential.

Project Objective Statement (POS):

Improve the queue completion percentages by selecting an achievable set of observations for the semester, by:

- Improve flexibility and strength of application’s access control.
- Increase flexibility of application in order to support NTAC and LPTAC processes.
- Improve tooling that supports committee proposal modification and editing.

Project Flexibility:

<table>
<thead>
<tr>
<th>Flexibility Matrix</th>
<th>Least Flexible</th>
<th>Moderately Flexible</th>
<th>Most Flexible</th>
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<tbody>
<tr>
<td>Scope</td>
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<td>Schedule</td>
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<td>Resources</td>
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Major Deliverables:

- Successive test releases containing a "shippable" subset of features.
- A final release that will mark the end of ITAC phase 2 development.

Assumptions:

- Team-size must remain small, on the order of a single full-time developer with part-time support from others.
- ITAC phase 1 gets delivered without major reduction of scope.
- All remaining requirements from the original ITAC proposal document must be implemented.

IS and IS NOT:

Describe what the project is and what the project is not, you can have as many is or is not as you want.

- IS: A continuation of features left behind from scoping for phase 1.
• IS: A succession of iterations (between 30-100 days in duration), roughly scheduled in order of priority and balanced between resources, that can stand on their own if effort is not available at the end of. Program creation is noticeably an exception as it has not proven amenable to scope reduction.

• IS: An evolution, not a reworking of phase 1.

• IS: A step towards industry standard databases instead of custom code.

• IS: Focused on improving user experience with the application.

• IS NOT: A full web re-creation of any other tool.

• IS NOT: The end of the database recreation.

• IS NOT: Focused on adding additional queue creation capabilities (although there are exceptions).

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**Strategy and Resources**

**Milestones and Stages:**

Define and describe a set of milestones for the project, also define stages that can be used later as off ramp points.

- **Azure Arrow**
  - Gemini NTAC
  - Roles
  - Access Windows
  - Joint merging

- **Baked Bug**
  - Distributed ITAC process
  - Proposal checking

- **Comfy Couch**
  - LPTAC
  - Undo (in anticipation of phase 1 descoping)

- **Damp Dandelion**
  - Email system improvements
  - Definition of observing condition bins
  - Definition of restricted bins
  - Additional reports and plots

- **Eager Ermine**
  - Super-user Administration
  - Additional program tagging
  - RA and Dec restriction enhancements

- **Free Fence**
  - “What-if” capability
  - Improved queue creation velocity

- **Giant Goon**
  - New program creation

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**Estimated Costs:**

- **Equipment**
  - Database Server
- Application Server
- People
- 5158 hours (including contingency) of senior software engineers familiar with the domain and tools. Iterations are scoped in units of 872 hours, 512 hours, 248 hours, 568 hours, 440 hours, 400 hours and 1024 hours.

**Core Team Members (see Guidelines for Developing New Projects document):**
- Project Manager – Devin Dawson
- Project Scientist – Sandy Leggett
- Systems Engineer - Undetermined

**Extended Core Team Members (hours are 2011 scheduled):**
- Larry O’Brien - 750
- Devin Dawson – 518
- Sandy Leggett – 56
- Rosemary Pike – 40
- Bryan Miller – 20
- Bryan Walls - 10

**Dependencies that require coordination:**
- ITAC Phase 1 must be completed before development on phase 2 can begin.

**Risks and Issues:**
- Technical risk: ITAC relies on a database migration that is not yet tested in production.
- People risk: Employee turnover, first project for an unproven new hire, under-specification risk.
- Schedule risk: Poor estimation.
- Technical risk: Some requirements are technically challenging and include imprecisions like ‘easy’.

**Supplemental Resources:**