

BioCADDIE Developer Workflows

Welcome to the NCSA/BioCADDIE project. Working on this project will require you to fit in to our development process, which includes:

- Agile/Scrum methodology using the NCSA OpenSource Atlassian tools (JIRA/Confluence)
- Git/Github for source code management using a "forking workflow"
- JIRA for task/sprint management
- Confluence for project documentation
- Slack for real-time chatting
- SDSC Cloud (OpenStack) for cloud computing resources

Create accounts:

The first step is to create accounts on each of the following systems. Send your username for each system to be added to the BioCADDIE projects.

- NCSA OpenSource: <https://opensource.ncsa.illinois.edu>
- Github: <https://github.com/>
- Dockerhub: <https://hub.docker.com/>

Agile/Scrum:

We use an [Agile/Scrum](#) method for project management. In short this means:

- We plan work in 2-week intervals (sprints)
- For each sprint, you "commit" to the work you will complete during the 2-week cycle. This requires estimating the amount of time each task will take you and ensuring that you understand the scope of the task you will be working on.
- [Sprints](#) and the [backlog](#) of tasks are managed in JIRA. For each sprint, you will move your tasks from TODO > In progress > Review > Done
- We have weekly meetings on Tuesdays from 3-4pm.

Github/Git:

We use Github for source code management. The primary repository is <https://github.com/nds-org/biocaddie>. We use a [forking workflow](#) with feature branches. In short, this means:

- Create a fork of the primary repository
- For each task or set of tasks, create a branch in your local repository.
- Make changes to your branch and push to your repository on Github
- When the work is complete, create a pull request for the primary repository.
- Once your pull request is reviewed and approved by another team member, it will be merged.

For more information, see the NDS [Developer Workflows](#).

JIRA

We use [JIRA](#) for task management. In short this means:

- Tasks are created and added to the NDS project backlog. BioCADDIE tasks should all have the "BioCADDIE" label.
- Tasks are assigned to team member during sprint planning. Tasks should have clear completion criteria so you know how to estimate them and when they are done.
- Team members are responsible for updating tasks through comments and changing status.
- In general, tasks will go from "Open" to "In progress" (start working) to "In Review" to "Done" (closed).
 - Tickets must be assigned to another team member for review prior to closing.
- Tickets are created and assigned for each sprint. Feel free to create new tickets to add to the project backlog.

For more information see the NDS [JIRA Workflows](#).

Confluence

We use Confluence for project documentation. Our main page is the [BioCADDIE](#) page, and we should create subpages from there.

Slack

We are part of the National Data Service team at NCSA and use the <https://nationaldataservice.slack.com/> #biocaddie channel for project communication.

- Install the Slack client or use the web interface
- Sign up for the <https://nationaldataservice.slack.com/> project
- Subscribe to the #biocaddie channel

Cloud computing resources

We have a small allocation of cloud computing resources available via SDSC Cloud. You will be provided with access to one or more virtual machines for your work.