# Technical Skills in Demand

The following skillsets are in high demand for the FOLIO project. If any community members are able to supply people who possess these skills please contact the Tech Council. Thanks!

## Resources needed - April 2020

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
<th>Skills required</th>
<th>Estimated Time Commitment</th>
</tr>
</thead>
</table>
| **Release Coordinator**     | We need someone to help coordinate release activities such as:  
- Coordinating with all team leads to ensure there are PR reviewers in place  
- Tracking module & version dependency spreadsheets and helping make sure all modules have owners and all version dependencies are planned and implemented (like upgrading a storage module to the latest supported RMB version).  
- Working with POs to track progress of critical features and dependencies  
- General logistical support for the release process | • Excellent communication skills  
• Organized project manager  
• Comfortable navigating Github, Confluence, JIRA  
• Semi-technical; must feel comfortable with development lingo and environments, but this role will NOT write or read code. | • Month 1 of release quarter: 12 hours per week  
• Month 2 of a release quarter: 8 hours per week  
• Month 3 of a release quarter: 20 hours per week |
| **Automated Test Developers** | We need developers to create automated tests, currently written in jmeter. A set of tests have been developed but we need to create more tests that simulate real-world workflows and scenarios. These tests would be incorporated into our carrier-io framework for performance tests. | • Java or equivalent programming experience  
• experience/comfort with Github | • Ideally 20 hours per week  
• As little as 8 hours per week could be helpful and productive. |
| **DevOps**                  | We want to augment the DevOps team with engineers who are comfortable with containers and orchestration and coding continuous integration and continuous deployment environments using the toolsets and environments that are used with FOLIO development. | See below, but:  
• Jenkins  
• Ansible  
• Docker  
• Kubernetes  
• Github  
• AWS | • At least 15 hours per week, **every** week.  
(One sprint on and one sprint off doesn’t work well for DevOps) |
| **Sysadmin**                | We need a Systems Administrator to help offload application administration tasks that our DevOps team is currently managing. Things like JIRA and Confluence administration (user setup/etc.). | • Confluence Administration  
• JIRA Administration  
• Github Administration  
• Slack Administration | • 1-2 hours per day  
 ideally resources would be available some portion of each day |
| **Test Data Developer**     | We have a critical need for a Test Data Developer to work with the Reporting SIG to assist the reporting community with curating and generating test data for our development environment so that report writers can test their queries with substantial data sets. | • Java  
• Go | • Ideally 20 hours per week |
| **SQL Developers**          | We need SQL developers to work with subject matter experts in the Reporting SIG to understand report requirements, then to develop new, open source report queries for the FOLIO community. | • SQL  
• data analysis | • Ideally 20 hours per week |
| **Java Developers**         | We need Java developers to develop and integrate open source tools for ad hoc querying of FOLIO data to help provide operational reporting capabilities to FOLIO libraries. | • Java | • Ideally 20 hours per week |

Additionally we are always looking for these resources:

**Back-end Developer**

1. Java 8 & Object-Oriented Design/Programming
2. Implementation of RESTful interfaces in a microservices model (RAML, JSON, XML)
3. Databases, both SQL and NoSQL – PostgreSQL specifically is a plus
4. Virtualization – Docker, Vagrant
5. Test tools/frameworks
6. CI/CD – Jenkins
7. Server-side Javascript (Node JS) and related tools/frameworks
8. Security – SSO, OAuth, SAML, LDAP, etc.
9. SCM - Git/GitHub
Front-end Developer

1. Client-side Javascript (React) and related tools/frameworks
2. Test tools/frameworks
3. CI/CD – Jenkins
4. Server-side Javascript (Node JS) and related tools/frameworks
5. Security – SSO, OAUTH, SAML, LDAP, etc.
6. SCM - Git/GitHub

DevOps Engineer

1. SCM (Git/GitHub)
2. CI/CD – Jenkins
3. Virtualization – Docker, Vagrant
4. Infrastructure Automation – Ansible, Puppet, Chef
5. Orchestration – Kubernetes/ECS, Rancher
7. Cloud - AWS, GoogleCloud

System Administrator

1. General Linux-based System Administration
2. General Application Administration (users, groups, application settings, licensing, etc.) for Slack/Github /Confluence/JIRA

Product Owner (PO) - Primary Responsibilities

- Own the team backlog, contribute to program vision and roadmap, Key stakeholder in story definition assisting the team with clarification, estimates, story sequencing and team objectives for each sprint
- Backlog refinement – Build, prune, and maintain the team requirements backlog (consisting of features, user stories, defects, and enablers) with input from the SIGs as key stakeholders
- Iteration Planning – Review and prioritize the backlog for iteration planning, including coordination of dependencies with other product owners
- Be the main source for feature detail and priorities for the development teams
- Responsibility for accepting the final iteration plan on behalf of the development team
- Just in time story elaboration – Keep the process flowing (balance between stale stories and inhibited flow of new stories)
- Drafting story acceptance criteria and providing examples when feasible
- Accepting stories into baseline
  - Validate that the stories meet acceptance criteria and completeness; meets Definition of Done
  - Validates fitness for use
  - The team member empowered to accepts stories (i.e. requirements) as truly done
- Participating in team demo and retrospective
  - As a key member of the team and the one person responsible for requirements, key in driving and developing the team demo
  - As a key member in the team retrospective helping drive improvements across the team and project
- Coordination of dependencies with other product owners throughout the sprint
- Manage communications and relationships with diverse stakeholders, ranging from Product Managers, Project Managers, developers, designers, QA engineers, architects and the key SIGs