**Question 1.** In a scenario like this, first I would explore any other libraries built upon this library. If that wrapper library includes the features that I’m looking for, I’d try to use that one instead. Or I’d try to use a combination of different libraries to complement each other and achieve the functionality.

If it does not work for the project, I would discuss with my team members if they encountered such issue and how did they resolve it. I would also discuss the possible delays that might occur in the releases due to this hinderance. I’d use the issues or discussion on the original library’s GitHub, to get any insights from the library maintainers. After compiling the whole information, I would fork and modify the existing library to add additional features according to the project’s requirements.

During my recent internship at University of Oulu, I faced such scenario. I was using the open source IRremote Library, and I needed to develop an adaptive modulation scheme. The library did not provide such feature to dynamically change modulation protocols. Creating my own custom modulation and demodulation was an expensive process. So, after discussing with my supervisor, I added my functionality in the library, and I was able to achieve my desired functionality while still able to use the core library features.

**Question 2.** Based on the priority of the library, the first thing I would do is to communicate with the team members to discuss the urgency of the PR and its criticality. I would make sure all the documentation is there for the PR reviewers, so they have a clear picture of the situation. In the meantime, I would test the library in development environment and use it in a temporary branch to ensure that it works properly with the rest of the application and has no bottlenecks or side effects. Once the team has approved the PR, I would remove the temporary branch and start using the new library.

**Question 3.** In such a case, first thing I’d do is to check the active issues tab of the library. This way, I’ll be able to analyze the limitations of the library and can assess any bugs and risks associated with it. Using this information, I’ll start testing the library and would contribute to the documentation so others may also benefit from it. If, in my testing, the library is useful, I would also publish the updated library and report issues on the GitHub to let the maintainers know what needs to be improved in the library. And in this whole process, I’d ensure that the stakeholders are aware of the risks of using this kind of library. So that there is a room for rectification in case any risk was overlooked, and it appears later.