# EE/CPRE/SE 491 Bi-Weekly Report
## sdmay21-06
## Pentest a Payment Provider

**Report Period**: 3/15/21-3/29/21
**Client & Advisor**: Benjamin Blakely

**Team Members & Roles**:

      Max Solaro - Chief Pentester
      Matthew Maiman - Testing Engineer
      Ryan Anderson - Lead Reporter
      Nathan Key - Editor
      Priyanka Kadaganchi - Facilitator & Scribe
      Jacob Conn - Web Pentester
      KayAnne Bryant - API Pentester

**Weekly Summary**:

The end of this week marks the end of our practical penetration test. Following this week, our main focus will be on filling out our reporting documents for Dwolla, making sure our findings are understandable to both a technical and non-technical audience. We will also begin preliminary planning for completing documents required for the course. While we are making these reports/documents, we will keep in close contact with our client to ensure all information is okay to be released, and avoiding vulnerabilities that are put under our NDA.

**Past Week Accomplishments**:

- Dwolla Technical and Executive Reports - Ryan
  - Created drafts for the two final reporting documents we will give to our clients as the final phase of our project. Created elements within the paper to make future reporting clean and consistent.
  - Followed penetration testing guidelines to ensure reports are up to industry standard, and worked with our client to make sure included information is what they want.
- Dwolla WebApp testing - Ryan, Nathan, Jacob
  - Wrapped up testing within the dwolla dashboard and accounts page within the sandbox environment.
  - Finished listing vulnerabilities tested and assigned severity levels for each test. Also began compiling screenshots/request information for final reports.
  - Began enaumrating areas of the web applications which were unable to be tested during our timeline, and will try to make time for in the future.
- API Testing - Max, Matt, KayAnne, Priyanka
  - Worked on compiling testing documentation for final reports.
  - Continued testing API for vulnerabilities, primarily worked on breaking control flow for things like customer creation, funding sources, and verification.

○ Looked into reports from automated testing to verify potential vulnerability severeness.

**Pending Issues:**
    We have no pending issues

**Individual Contributions:**

| Name | Contributions | Hours last 2 weeks | Cumulative Hours |
|------|---------------|--------------------|------------------|
| Max Solaro | Utilized Zap to continue running tests against the api, both automated and manual. Looked into breaking api control flow and further investigated field sanitation. | 5 | 28 |
| Matthew Maiman | Concluded testing on the API side of the Dwolla environment. Fleshed out any outstanding areas of concern and made final conclusions on vulnerabilities. Filled out vulnerability reporting table. | 12 | 37 |
| Ryan Anderson | Wrapped up testing for the Dwolla dashboard and accounts page. Created documents for final reporting. Began steps to create final report for vulnerability analysis. | 14 | 48 |
| Nathan Key | | | 20 |
| Priyanka Kadaganchi | Wrapping up last minute tests and starting to collect data for writing reports | 3 | 20 |
| Jacob Conn | Wrapped up testing for Dwolla Dashboard. Beginning steps for reporting and | 5 | 25 |
| KayAnne Bryant | Finishing final testing on API and beginning the documentation for vulnerability reporting | 5 | 25 |

**Plans For Upcoming Week**:
- Dwolla WebApp testing - Ryan, Nathan, Jacob
    - Begin to create vulnerability reports for all issues found within the dashboard. Evaluating each vulnerability to give it a proper rank, as well as making sure steps to re-create the vulnerability are clear.

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    - Try and get to un-tested areas of the dashboard and accounts page that were unable to be tested during our planned testing time.
  - API - Max, Matthew, Priyanka, KayAnne
    - Document test results for use in the technical report and executive summary papers
  - Everyone
    - Fill out final reporting documents that will be given to our clients, and make sure technical language is at an appropriate level for the specific document.


**Advisor Meeting Summary**:

During our weekly client meeting with Dwolla, we continued our discussion about vulnerabilities found in the WebApp and API, and their impact on Dwolla's systems. We also discussed standards that can be used for our final report to Dwolla.