Sprint 3 Retrospective
R&M Software Solutions
[student names redatced]

What functionality does the system have at the end of this sprint? List user stories that you successfully implemented during this sprint (1 pt)

After this sprint, the system is now able to allow users to bypass using Facebook pay to purchase tickets. The scraper is able to discern whether or not an event needs tickets purchased. If there are tickets needed, it embeds the corresponding eventbrite URL after the event's description. If there aren't tickets for it on eventbrite, it doesn't embed anything. This was especially tricky because the eventbrite URL wasn't publicly visible on the Facebook page so it was harder to scrape. Facebook was using the URL as the backend for their Facebook Pay option. We realized we had to find it in the source code and then decode it from it's URL-encoded form to its proper ASCII character form. We were then able to turn it into a clickable link.

The scraper is also able to generate a google maps URL for all events and embeds that on the page as well. Users are able to click on it and easily get directions to the event. There are also two other links that users can click on: a link to the hosting organization's Facebook page and a link to the event itself on Facebook. These two links were much easier to generate since there was no real web scraping needed to find them, we already had them by default. Another minor detail we implemented is that users will now see the proper AM/PM time format for events instead of the 24-hour format it was in during the last sprint.

The biggest feature that was implemented was getting the posts to populate wordpress in proper order. In the previous sprint, event posts were being made in the order that the scraper saw them. Now, we have the scraper make a list of post objects. Each post object has a separate attribute attached to it which is the corresponding datetime string. We were then able to sort that list of posts by the time string and then iterate over them, posting to wordpress in proper order.

User stories accomplished in Sprint 3:

As a user, I want to be able to click a link to get tickets so that I know if I need tickets, I can easily purchase them.

As a user, I want to be able to see posts on wordpress in proper chronological order, so that I know at a glance which events are coming up first.

As a user, I want to be able to see the time of the event in standard time notation, so I don't have to read it as 24-hour notation.

As a user, I want to know which organization is hosting any given event, so that I can go to their facebook page and read more about them.

As a user, I want to have a link with directions to each event, so that I can click it and immediately know how far it is from me.

As a user, I want to have a link to the original facebook event post, so that if I have a facebook account, I can use facebook's features in regards to that event.

Did you end up making any changes to any of these user stories? Did you break down further any of the user stories? Did you identify any new user stories during this sprint and, if so, did you add them to the product backlog or decide to implement them right away? Explain (1 pt)

- New story created: *See event time in standard time*
  - We realized that when the scraper pulled event times, they were in 24-hour notation and it would be difficult for some users to read. We decided to implement this story right away because we are focused on creating a functional MVP and this is a feature that would be necessary to have for that.
- New story created: *See event organizers*
  - When we last spoke with [project partner], she specified that she would like to see who is hosting the events in the event details. This was an easy task so we decided to implement this in our current sprint.
- New story created: *Have links with directions to event*
  - [project partner] wanted us to show a map somewhere on the event details page and it was a little difficult to get the scraper to interact with a map plugin. Instead, we found a work-around that provides a link to directions to the events. We felt this was necessary to implement now for our MVP because our client requested it.
- New story created: *Have link to original Facebook post*
  - We felt that seeing the original Facebook post would be useful for users who have an account and want to see more info than we provide. We decided to implement this now because we felt it was an easy task to get done.
- New story created: *Decide where the scraper's final home will be*
  - We added this story to the backlog because we aren't so sure where exactly we want the scraper to be when we deliver it to [project partner]. We are

thinking it might end up just being a simple .exe that she can run from her desktop whenever she wants to update her website.
- New story created: *Insert new events in between previously posted events*
  - This story has to be implemented during the final sprint because it is the last thing we need in order to have a fully functioning MVP. Even if we don't get to more advanced stories such as filtering posts, this one has to be working; Otherwise, new event posts might not always be in the right order.
- Story points changed: *See upcoming events in order*
  - We decided to increase the points to this story from 3 to 5 because we found it to be more difficult than anticipated.
- Story points changed: *See if I can purchase tickets to the event*
  - We increased the points to this story from 8 to 13 because of the difficulties faced when trying to implement it.

What are the "lessons learned" at the end of this sprint? What would you do differently next time? Explain (1 pt)

- **Don't get discouraged**

When working on implementing the ticket feature, we got stuck for hours figuring out how to bypass Facebook's Pay feature. We wanted to redirect users to the unique eventbrite URL instead, but it was very hard to find where to scrape that from. We thought it would be just as easy as scraping other elements like the title, description, etc., but it wasn't because it wasn't a visible element on the page, it was hidden. After giving that story some space (a night of sleep), we were able to come up with a way to get the proper data string and decode the URL into a usable format. There should've been an easier solution, but if it works, it works and that was an accomplishment in itself.

- **Know when to push stories to another sprint**

During this sprint, we realized that we had to push the "filter events" story to the next sprint. We had to get the more essential features of the page working properly first. To be specific, getting events to actually post in order was a higher priority towards the overall functionality of the page versus being able to filter by different criteria. It was surprisingly time-intensive figuring out how to come up with the proper data structure to sort all of the posts properly by their starting time before pushing them.

Provide an updated numbered list of all user stories yet to be implemented; indicate pre- and post-conditions (1 pt)

ID	As a/an	I want to…	so that…	Notes	Priority	Size
1	User	filter the events page based on interests, time, organization, and location	I spend less time looking at the wrong events	This is a nice-to-have. It will be the last thing we implement if time allows for it. We tried it in sprint 3 and it presented quite a challenge.	Medium	8
2	Admin	Add and delete URL's from the scraper list	So I don't have to re-upload the list	Most likely will use google forms and google sheets to store the URLs	High	3
3	Admin	view analytics related to the calendar and events	I can have the data	Nice to have, but wordpress already has built-in analytics	Low	3
4	Admin	decide where the scraper's final home will be	we know where it will be running for the customer's convenience		Very High	5
5	Scraper	be automated	update the webpage without admin interaction	We might not do this, the precondition is Story 4 where we decided the final home of the scraper, it might end up just being a clickable .exe file	medium	5
6	Scraper	be able to insert new events in between previously posted events	new events are also put in proper chronological order	This is the major focus for the final sprint	Very High	8
SUM						32