**Product Backlog**

**MeetMerge: Calendar Availability Combiner**

After discussing with my team, we've put together these user stories for our calendar combiner app. I tried to cover all the essential features we'll need plus some nice-to-have stuff for later sprints.

**Core User Stories**

1. **Link Input**
   * As a user, I want to paste multiple Calendly links into the app so I can find when everyone is free without manually checking each calendar.
   * Criteria for satisfaction:
     + The interface should let me paste at least 5 different Calendly links
     + The system should check if the links are valid Calendly URLs
     + I should get some kind of error message if I paste an invalid link
     + Should be able to add links one by one or all at once
2. **Google Calendar Support**
   * As a user, I want to paste Google Calendar links too, since not everyone uses Calendly.
   * Criteria for satisfaction:
     + System needs to work with Google Calendar sharing links
     + It should correctly pull availability info from these Google Calendar links
     + Users should be able to mix Calendly and Google Calendar links together
3. **Finding Overlapping Times**
   * As a user, I want the app to show me when everyone is available at the same time.
   * Criteria for satisfaction:
     + System needs to accurately find times that work for everyone
     + It should handle different time zones correctly
     + Results should clearly show the date and time ranges that work
4. **Showing Results Clearly**
   * As a user, I want to see the available times in an easy-to-understand format.
   * Criteria for satisfaction:
     + Results should look like a calendar view
     + Times should be in my local time zone
     + If there are no overlapping times, it should tell me that
5. **Creating a New Calendly Link**
   * As a user, I want to generate a new Calendly link with just the overlapping times so I can send one link to everyone.
   * Criteria for satisfaction:
     + System creates a new Calendly event showing only times when everyone's free
     + The link should actually work when people click it
     + I should be able to give the event a custom name and description
6. **Lettucemeet Integration**
   * As a user, I want to create a Lettucemeet poll with the overlapping times since some people prefer that.
   * Criteria for satisfaction:
     + System should pre-fill a Lettucemeet poll with the times that work for everyone
     + The link should work correctly
     + I should be able to add a title and description for the poll

**User Account Features**

1. **Creating an Account**
   * As a new user, I want to make an account so I can save my settings and previous calendar combinations.
   * Criteria for satisfaction:
     + Should be able to sign up with email and password
     + System should check if my email is valid and password is strong enough
     + I should get a confirmation email
     + My account info should be stored securely
2. **Logging In**
   * As a returning user, I want to log in to access my saved stuff.
   * Criteria for satisfaction:
     + System checks my username and password
     + Keeps me logged in until I log out
     + Has a "forgot password" option
3. **Saving Calendar Combinations**
   * As a logged-in user, I want to save sets of calendar links so I don't have to paste them again next time.
   * Criteria for satisfaction:
     + I can give a name to a set of calendar links and save them
     + I can see my saved combinations in my account dashboard
     + I can view, edit, or delete saved combinations

**Additional Functionality**

1. **Date Range Filtering**
   * As a user, I want to specify what dates I'm looking at so I don't get results from months away.
   * Criteria for satisfaction:
     + Can set start and end dates for my search
     + System only looks at availability within those dates
     + Default range should be reasonable (like next 2 weeks)
2. **Meeting Length Settings**
   * As a user, I want to specify how long my meeting needs to be.
   * Criteria for satisfaction:
     + Can set minimum meeting length (30 mins, 1 hour, etc.)
     + System only shows time slots long enough for my meeting
     + Should tell me if no slots are long enough
3. **Email Sharing**
   * As a user, I want to email the results to everyone so they can see when we're all free.
   * Criteria for satisfaction:
     + Can enter email addresses of participants
     + System sends a nicely formatted email showing when everyone's free
     + Email includes any Calendly or Lettucemeet links I generated
4. **Mobile-Friendly Design**
   * As a mobile user, I want the app to work well on my phone so I can use it on the go.
   * Criteria for satisfaction:
     + Interface should look good and be usable on small screens
     + All important functions work on mobile browsers
     + Design is optimized for touchscreens
5. **Dark Mode Option**
   * As a user, I want a dark mode to use at night or in dark rooms.
   * Criteria for satisfaction:
     + Can switch between light and dark modes
     + Dark mode looks consistent across all pages
     + App remembers my preference

**Nice-to-Have Features**

1. **Viewing History**
   * As a logged-in user, I want to see my previous calendar combinations.
   * Criteria for satisfaction:
     + Dashboard shows recent combinations I've made
     + History includes when I made them and a summary of results
     + Can sort and filter my history entries
2. **Direct Calendar Connection**
   * As a user, I want to connect my calendar directly instead of manually creating share links.
   * Criteria for satisfaction:
     + Can authorize the app to access my Google/Microsoft/Apple calendar
     + System handles the authentication securely
     + System correctly finds my availability from my connected calendar
3. **Team Management**
   * As a team organizer, I want to save groups of people so I can quickly schedule with the same team again.
   * Criteria for satisfaction:
     + Can create and name different teams/groups
     + Can add or remove people from groups
     + Can select a saved group when creating a new calendar combination
4. **Exporting Options**
   * As a user, I want to export the available times in different formats to use elsewhere.
   * Criteria for satisfaction:
     + System offers common export formats (CSV, iCal)
     + Exported data includes all the important information
     + Files download correctly to my device
5. **Recurring Meeting Support**
   * As a team organizer, I want to find times that work regularly so I can schedule weekly/monthly meetings.
   * Criteria for satisfaction:
     + Can specify pattern (weekly, bi-weekly, monthly)
     + System finds slots that work consistently for that pattern
     + Results clearly show which slots work for recurring meetings
6. **Guest Access**
   * As a user without an account, I want to use basic features without signing up.
   * Criteria for satisfaction:
     + Guest users can do basic calendar combining
     + Results are available for at least 24 hours
     + Guests are encouraged but not forced to create an account
7. **Buffer Time Settings**
   * As a user, I want to add buffer time between meetings so I'm not rushing from one to the next.
   * Criteria for satisfaction:
     + Can set buffer time (15 mins, 30 mins, etc.)
     + System considers this buffer when finding available slots
     + Buffer preference can be saved in my settings
8. **Feedback System**
   * As a user, I want to give feedback about the app so the developers know what to improve.
   * Criteria for satisfaction:
     + Can submit feedback through a form in the app
     + Can give both a rating and written comments
     + Get confirmation that my feedback was received

I think we should focus on the first 6 stories for Sprint 1 since they form the core functionality. Then we can add user accounts and the additional features in Sprint 2. The nice-to-have features could be considered if we have extra time or for future development after the course.