Project Blue - Project Proposal

Scott Perretta, Kino Rose, Adam Burton, Krzysztof Konopka

1. The users of our open-source calendar application will be local self-help nonprofit organizations affiliated with the Education for Development and Support Network Foundation and the EDSN Foundation themselves. Project Blue's community calendar system will provide the functions that meet the needs of the EDSN Foundation. Organizations will have their personal community calendar which will allow them to create, view, modify, and share events. Keeping the usage consistent to the EDSN Foundation's current system, all organizations are provided a calendar module with their website. All calendar modifications will be saved onto a centralized MySQL database, allowing the EDSN Foundation to have complete access to all data within their community calendar system. By keeping the intended use similar to the current community calendar system, we can simplify the transition for the affiliated nonprofit organizations while having a centralized database for the EDSN Foundation.

2. The overall functionality of the community calendar system will share similarities with the core features of time.ly's calendar application. For starters, users will be able to view the calendar data in different forms (per day, per month, etc.), allowing users to aggregate and visualize their events. Users will be able to create and modify events with numerous details such as address, contact information, host information, website, categories, and tags. This way users will easily be able to find the events relevant to them. These events can also be recurring. Users will also be able to import and export calendar data to commonly used public APIs like google/apple/etc.

Our community calendar application will help users efficiently create, modify, share, and import events within their community calendar. For the EDSN Foundation, there will be one centralized MySQL database which contains all data from every community calendar, allowing the access to all community calendars and events. Not only will this system help current users easily manage and modify their community calendar, but also help the EDSN foundation administrate all calendar data across the system.

3. There are several main components we would like to include in the community calendar system. The first is a calendar view which acts as the main view of the application. This view should display event dates, names, and the number of events on any calendar day. Furthermore, there will be multiple views such as day view, week view, and month view. On the back end, the data will remain the same, but represented differently on the front end.

The next component would be the ability to creating an event. Creating an event should be simple; it should be a form that prompts the user to enter the required data(name, data, tags, etc.)

in a way that's familiar to the previous system (time.ly). This familiarity will help users get quickly acclimated to the new system. The data retrieved from the user will be handled on the back-end and checked for any discrepancies before being solidified in our database.

Another component we would want to include is the ability to modify an event, including deleting and editing an already existing event. Deleting events should be intuitive. By hovering over the event in one of the calendar views, the user should have the option to delete the event from the calendar. The important part being that deletion of an event would require privilege rights to the event owner or system administrator. On the back end, this would be querying for users who can delete the event before handling the operation. Editing events will be similar to the create event form. The fields in the form should be pre-filled with the necessary data from the selected event. Once the user submits the changes, the changes will apply to the SQL database tuple that corresponds to the event. Finally, some of the properties the user will be able to change are data, tags, event name, time.

Another critical component to the community calendar system is sharing events. Sharing events will allow users to share events with other users on different platforms. Users will have the ability to share events on multiple social media platforms such as facebook, twitter, or Instagram. will be accomplished by exporting the events through popular APIs that support events (Facebook, Google, etc.). On the back end, there will be no change to the database; however, the data sent to public APIs may require modification into a readable format for exporting.

The final component of the system will be importing events from other calendar platforms. As mentioned above, users should be able to import events using public APIs such as Google. The design for importing events should consist of a single form that accepts different API calls. This form would contain buttons to popular APIs such as Google to keep the interface simple. After data is submitted off-site, the data will be handled on the back end to match the data fields contained within our MySQL database.

We broke down the components in this way as these are the primary functions of the available time.ly calendar. Each one of these components will require a back-end and front-end with multiples features. Limiting the differences in features will allow current users to quickly transition systems, while still being able to store all calendar data to the centralized MySQL database. Each calendar module on the nonprofit's websites will connect directly to the database, so any changes or modifications are immediately saved and accessed by the EDSN Foundation.