



glinnO

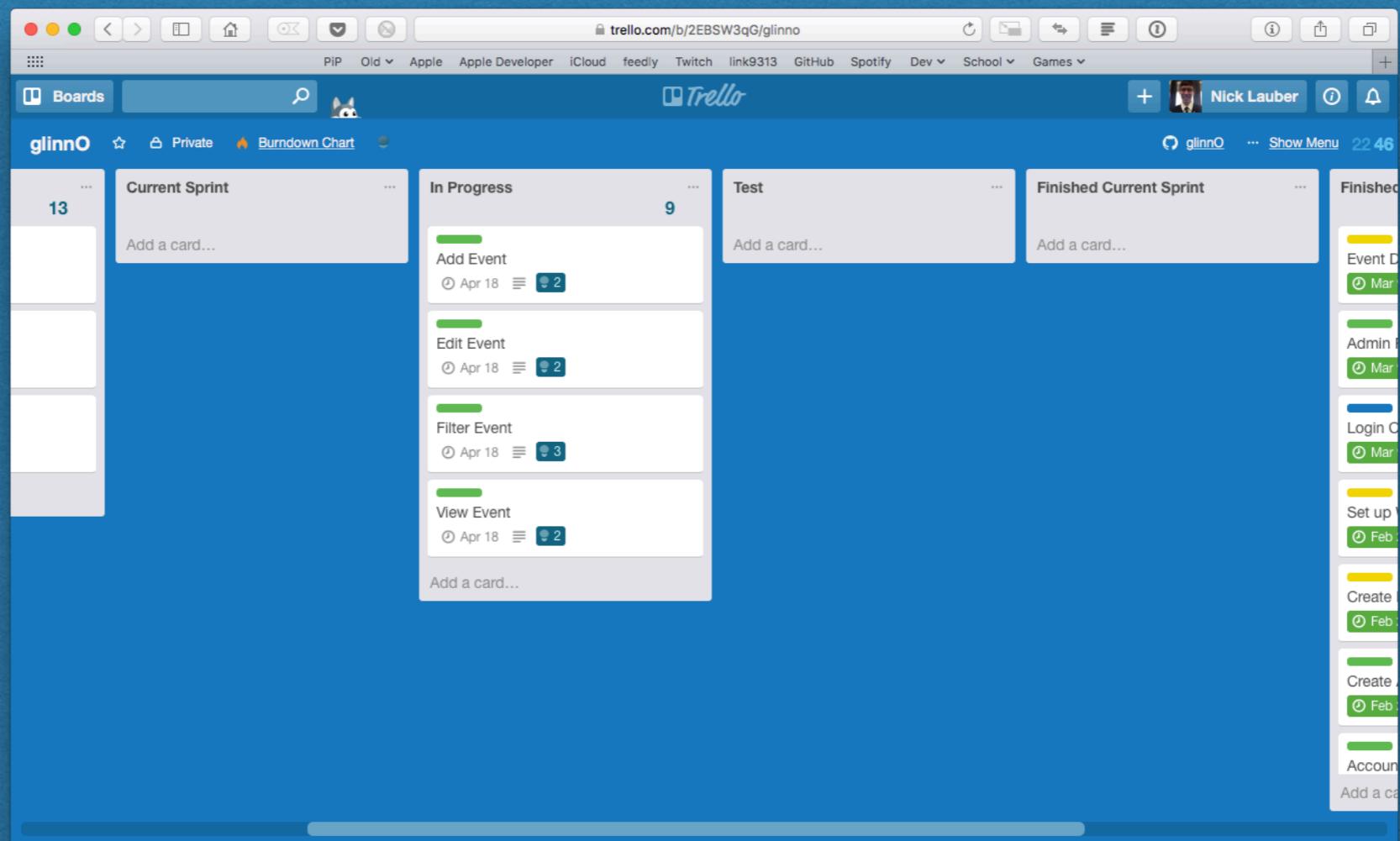
Nicholas Lauber

Problem and Motivation

- Omaha's "hidden" music
- Tourists and local fans
- Calendar of small venue performances
- "One-stop shop" for what is happening
- Agile Development Sprints

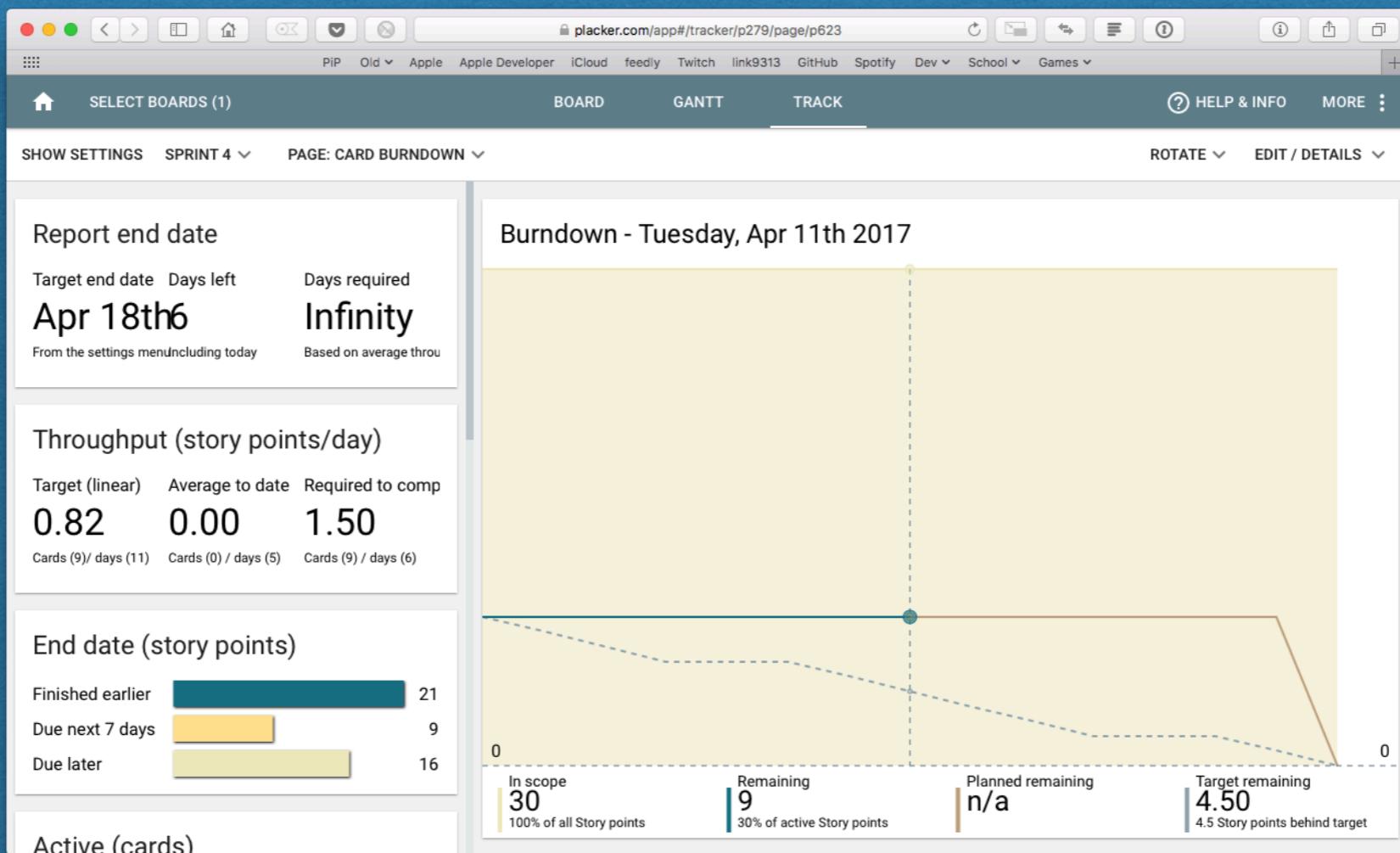
Management

- Trello - Kanban-style board



Management

- Placker - Burndown and Milestone Tracking



Implementation

- UserFrosting - PHP Framework with PostgreSQL
 - Modular Design - 'Sprinkles'
 - Code Separation (MVC)
 - Asset Compilation (Node.js)
 - Laravel Eloquent ORM for Data Management
 - Pluralization Rules and Nested Subkeys
 - Request Throttling
 - Data Request APIs
 - Fortress Interface for Unified Client- and Server-side Validation
 - Error Handling
 - Monolog for Logging
- User Features
 - User Accounts
 - User Profiles
 - Administrative User Management
 - Roles and Permissions
 - Password Reset
 - Captchas and Email Verification
 - Root Account
 - User Activity & IP Address Logging
 - User Groups

localhost/glinno/public/account/register

glinnO

Register

Name and email

First name Last name

Email (verification required - use a real address!)

Username [Suggest]

Choose a unique username

Password

Between 12-100 characters

Confirm password

Enter the captcha

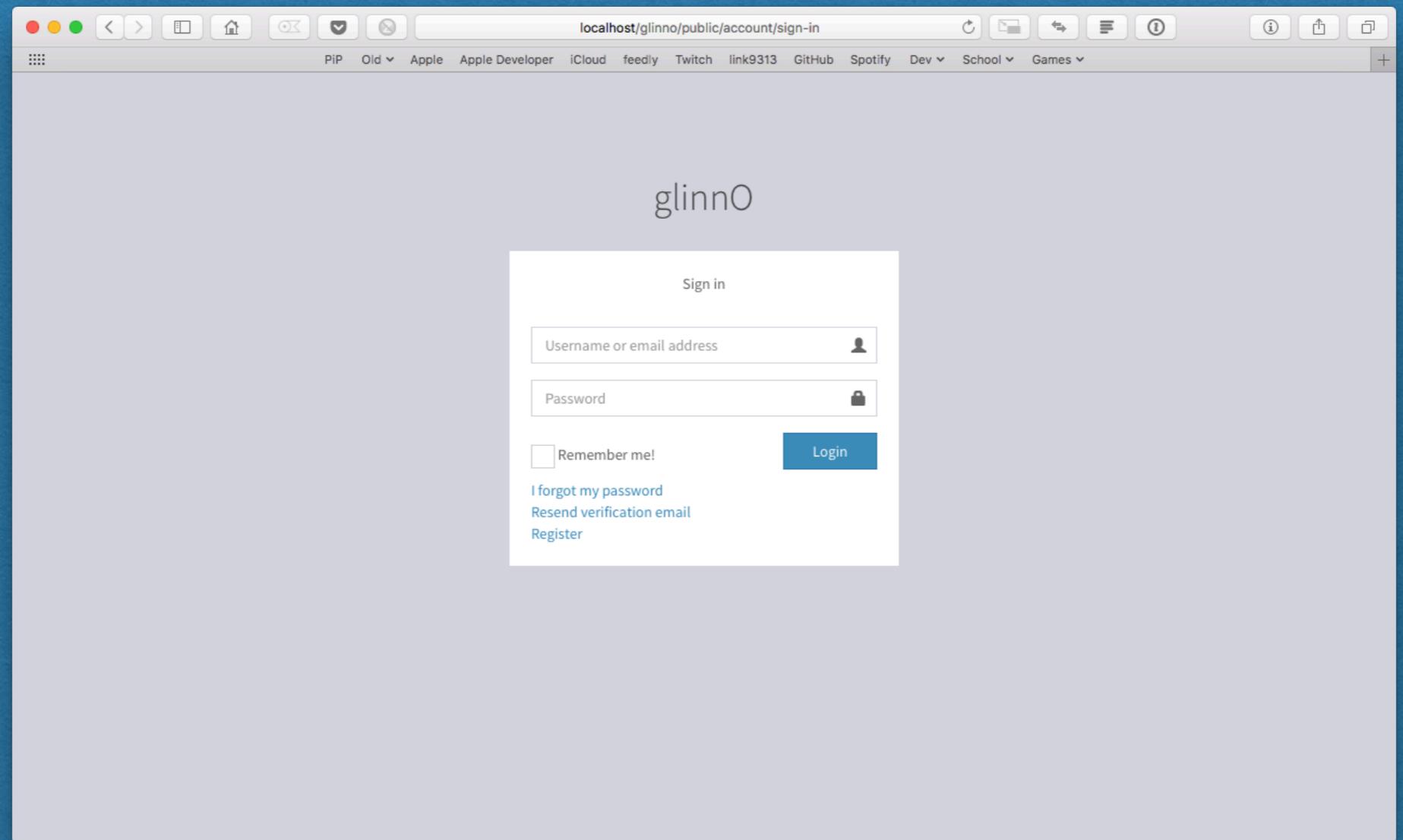
42bc1

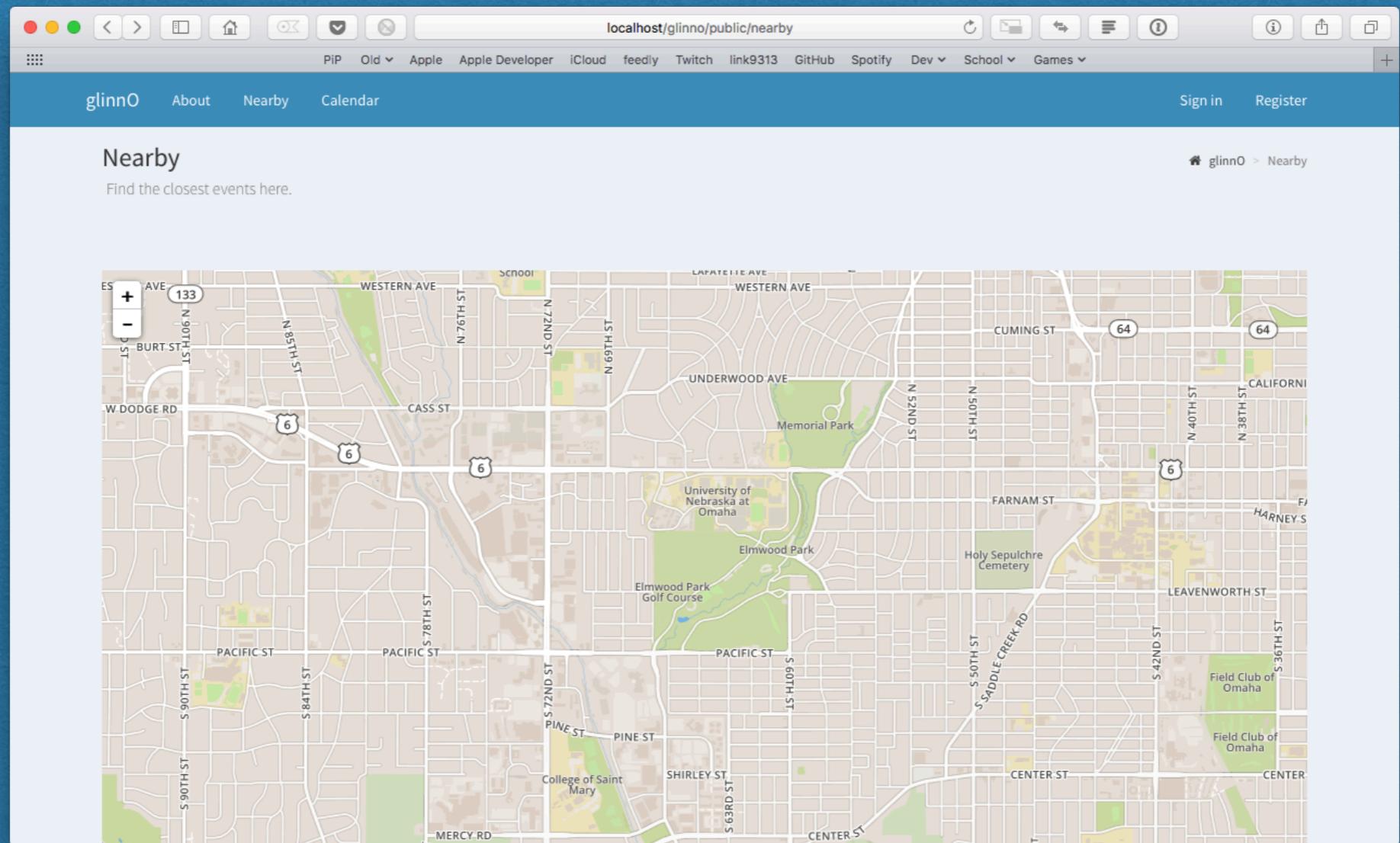
By registering an account with glinnO, you accept the [terms and conditions](#).

Sign me up

Already have an account? [Sign in here](#).

This screenshot shows a registration form titled 'Register' for the domain 'glinnO'. The form includes fields for name and email, a username suggestion feature, password creation, and a CAPTCHA verification. It also includes a link to accept terms and conditions and a sign-up button.





localhost/glinno/public/calendar

glinnO About Nearby Calendar Sign in Register

Calendar

Find all the events here.

April 2017

< > today month week day list

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

Category▼

Please enter a artist/venue.

Artist/Venue

Search

Go Back

8p UNO Jazz 1

8p UNO Jazz 2

8p The SuperBytes
9p Kennedy Jones

9p Clark & Compan
10p The Sonics

7p Excision
+2 more

10p The Sonics

8p The SuperBytes

localhost/glinno/public/admin#&sort[table-activities][occurred_at]=desc&page[tab]

YOU ARE SIGNED IN AS THE ROOT USER

Nicholas Lauber

glinno > Dashboard

Dashboard

USERS 2

ROLES 4

GROUPS 3

Latest Users

Nicholas Lauber 2 weeks ago

Nicholas Lauber 3 weeks ago

View all users

System information

UserFrosting version	4.0.12-alpha
PHP version	7.1.3
Webserver software	Apache/2.4.25 (Unix) OpenSSL/1.0.2k PHP/7.1.3
Database version	pgsql 9.6.2
Database name	nick
Project directory	/Users/nick/Sites/glinno
Site root url	https://localhost/glinno/public
Loaded sprinkles	core account admin

Activities

Activity Time ▲ User ▲ Description ▲

Activity Time	User	Description
Tuesday Apr 11th, 2017 12:34 pm	Nicholas Lauber (admin) nlauber@unomaha.edu	::1 User admin signed in.
Monday Apr 10th, 2017 9:59 pm	Nicholas Lauber (admin) nlauber@unomaha.edu	::1 User admin signed out.
Monday Apr 10th, 2017 9:33 pm	Nicholas Lauber (admin) nlauber@unomaha.edu	::1 User admin signed in.
Monday Apr 10th, 2017 11:42 am	Nicholas Lauber (admin)	::1 User admin signed out.

localhost/glinnO/public/admin/users#&sort[table-users][name]=asc&page[table-users]=1

YOU ARE SIGNED IN AS THE ROOT USER Nicholas Lauber

glinnO > Users

Users

A listing of the users for your site. Provides management tools including the ability to edit user details, manually activate users, enable/disable users, and more.

User	Last Activity	Status/Actions
Nicholas Lauber (contributor) link9313@gmail.com	Saturday Apr 8th, 2017 4:55 pm <i>User contributor signed out.</i>	Active
Nicholas Lauber (admin) nlauber@unomaha.edu	Tuesday Apr 11th, 2017 12:34 pm <i>User admin signed in.</i>	Active

« < 1 to 2 of 2 (2) > »

Jump to Page: 1 • Show: 10

[Create user](#)

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PIP Old Apple Apple Developer iCloud feedly Twitch link9313 GitHub Spotify Dev School Games

Nicholas Lauber

Terran

Search...

NAVIGATION

- Dashboard
- Users
- Activities
- Roles
- Permissions
- Groups
- Events

localhost/glinno/public/admin/users/u/admin#&sort[table-user-activities][occurred]

YOU ARE SIGNED IN AS THE ROOT USER

glinno > Users | admin

Nicholas Lauber

Terran

Search...

NAVIGATION

Dashboard

Users

Activities

Roles

Permissions

Groups

Events

Users | admin

User information page for admin

admin
TERRAN

First name: Nicholas

Last name: Lauber

Email: nlauber@unomaha.edu

Locale: English

Edit

Account tools

Password Roles Disable Delete

Activities

Download CSV

Activity Time	Description
Thursday Mar 16th, 2017 9:49 pm	::1 User admin signed in.
Thursday Mar 16th, 2017 9:50 pm	::1 User admin signed out.
Sunday Mar 26th, 2017 4:18 pm	::1 User admin signed in.
Sunday Mar 26th, 2017 9:12 pm	::1 User admin signed in.
Sunday Mar 26th, 2017 11:03 pm	::1 User admin signed out.

1 to 5 of 40 (40) < >

This screenshot shows a user management interface for a system named 'glinno'. The top navigation bar includes links for PIP, Old, Apple, Apple Developer, iCloud, feedly, Twitch, link9313, GitHub, Spotify, Dev, School, and Games. The main header 'Users | admin' is displayed above a sub-header 'User information page for admin'. On the left, a sidebar lists navigation items: Dashboard, Users, Activities, Roles, Permissions, Groups, and Events. The main content area shows a user profile for 'admin' (TERRAN), with fields for First name (Nicholas), Last name (Lauber), Email (nlauber@unomaha.edu), and Locale (English). Below this is an 'Edit' button. A section titled 'Account tools' contains buttons for Password, Roles, Disable, and Delete. To the right, a 'Activities' table lists five entries of user sign-in and sign-out events from March 16th and 26th, 2017. A 'Download CSV' button is located at the top right of the activities table. The bottom of the page shows a navigation footer with links for 1 to 5 of 40 (40) and navigation arrows.

localhost/glinno/public/admin/users/u/admin#&sort[table-user-activities][occurred]

Manage Roles

Name	Description	Remove
User	This role provides basic user functionality.	X
Site Administrator	This role is meant for "site administrators", who can basically do anything except create, edit, or delete other administrators.	X
Group Administrator	This role is meant for "group administrators", who can basically do anything with users in their own group, except other administrators of that group.	X
Contributor	This role allows for the creation and deletion of events.	X

Assign new role:

Select a role

Update Cancel

Account tools

>Password Roles Disable Delete

Mar 26th, 2017 4:18 pm

Sunday Mar 26th, 2017 9:12 pm

Sunday Mar 26th, 2017 11:03 pm

Download CSV Description

YOU ARE SIGNED IN AS THE ROOT USER Nicholas Lauber

glinno > Users | admin

::1 User admin signed in.

::1 User admin signed out.

::1 User admin signed in.

::1 User admin signed in.

1 to 5 of 40 < >

Nicholas Lauber

Terran

Search...

NAVIGATION

Dashboard

Users

Activities

Roles

Permissions

Groups

Events

First name

Nicholas

Email

nlauber

Edit

Update Cancel

Account tools

Password Roles Disable Delete

Mar 26th, 2017 4:18 pm

Sunday Mar 26th, 2017 9:12 pm

Sunday Mar 26th, 2017 11:03 pm

Download CSV Description

YOU ARE SIGNED IN AS THE ROOT USER Nicholas Lauber

glinno > Users | admin

::1 User admin signed in.

::1 User admin signed out.

::1 User admin signed in.

::1 User admin signed in.

1 to 5 of 40 < >

localhost/glinno/public/admin/activities#&sort[table-activities][occurred_at]=desc

YOU ARE SIGNED IN AS THE ROOT USER

Nicholas Lauber

Activities

A listing of user activities.

Activities

Activity Time ▲ User ▲ Description ▲

Activity Time ▲	User ▲	Description ▲
Tuesday Apr 11th, 2017 12:34 pm	Nicholas Lauber (admin) nlauber@unomaha.edu	::1 <i>User admin signed in.</i>
Monday Apr 10th, 2017 9:59 pm	Nicholas Lauber (admin) nlauber@unomaha.edu	::1 <i>User admin signed out.</i>
Monday Apr 10th, 2017 9:33 pm	Nicholas Lauber (admin) nlauber@unomaha.edu	::1 <i>User admin signed in.</i>
Monday Apr 10th, 2017 11:42 am	Nicholas Lauber (admin) nlauber@unomaha.edu	::1 <i>User admin signed out.</i>
Monday Apr 10th, 2017 10:16 am	Nicholas Lauber (admin) nlauber@unomaha.edu	::1 <i>User admin signed in.</i>
Sunday Apr 9th, 2017 4:05 pm	Nicholas Lauber (admin) nlauber@unomaha.edu	::1 <i>User admin signed out.</i>
Sunday Apr 9th, 2017 4:03 pm	Nicholas Lauber (admin) nlauber@unomaha.edu	::1 <i>User admin signed in.</i>

Download CSV

glinno > Activities

Nicholas Lauber

Nicholas Lauber

Terran

Search...

Dashboard

Users

Activities

Roles

Permissions

Groups

Events

The screenshot shows a Mac OS X desktop environment with a browser window open to the [glinno public admin interface](http://localhost/glinno/public/admin/roles#&sort[table-roles][name]=asc&page[table-roles]=1). The URL bar at the top of the browser shows the full path. The main content area is titled "Roles" and displays a table of four roles: Contributor, Group Administrator, Site Administrator, and User. Each role has a description and an "Actions" button. A navigation sidebar on the left lists various site sections like Dashboard, Users, Activities, Roles (which is selected), Permissions, Groups, and Events. A search bar is also present in the sidebar. The top right corner shows the user is signed in as the root user, Nicholas Lauber.

Roles

A listing of the roles for your site. Provides management tools for editing and deleting roles.

Role	Description	Actions
Contributor	This role allows for the creation and deletion of events.	Actions
Group Administrator	This role is meant for "group administrators", who can basically do anything with users in their own group, except other administrators of that group.	Actions
Site Administrator	This role is meant for "site administrators", who can basically do anything except create, edit, or delete other administrators.	Actions
User	This role provides basic user functionality.	Actions

« < 1 to 4 of 4 (4) > »

Jump to Page: 1 Show: 10

[Create role](#)

The screenshot shows a web application interface for managing user roles. The top navigation bar includes links for PIP, Old, Apple, Apple Developer, iCloud, feedly, Twitch, link9313, GitHub, Spotify, Dev, School, and Games. The main header features a logo for 'glinnO' and the message 'YOU ARE SIGNED IN AS THE ROOT USER'. A sidebar on the left displays the user profile of 'Nicholas Lauber' (Avatar, Name, Star Terran) and a search bar. The sidebar also lists 'NAVIGATION' items: Dashboard, Users, Activities, Roles (selected), Permissions, Groups, and Events.

The central content area is titled 'Roles | Contributor' and describes it as a 'Role information page for Contributor'. On the left, there is a form for editing the 'Contributor' role:

- Name:** Contributor
- Slug:** contributor
- Description:** This role allows for the creation and deletion of events.

At the bottom of this section are 'Edit' and 'Delete' buttons.

To the right, under the heading 'Permissions', is a table listing various permissions with their corresponding slug/conditions:

Permission	Slug/Conditions
Account settings page	<code>uri_account_settings</code> ↳ <code>always()</code> View the account settings page.
Create event	<code>create_event</code> ↳ <code>always()</code> Create a new event.
Delete event	<code>delete_event</code> ↳ <code>has_role(user.id,4) && equals_num(self.id,event.creator_id)</code> Delete events owned by the user.
Edit event	<code>update_event_field</code> ↳ <code>has_role(user.id,4) && equals_num(self.id,event.creator_id) && slug_in(['name','location','date','all_day','start_time','end_time','url','flag_enabled'])</code> Edit events owned by the user.
Edit user	<code>update_account_settings</code> ↳ <code>always()</code> Edit your own account settings.

A 'Download CSV' button is located at the top right of the permissions table.

localhost/glinno/public/admin/roles/r/contributor#&sort[table-role-permissions][name]

YOU ARE SIGNED IN AS THE ROOT USER

glinno > Roles | Contributor

Download CSV

Role

Name

Slug

Description

Contributor

contributor

Override

This role allows for the creation and deletion of events.

Update role

Cancel

Nicholas Lauber

Nicholas Lauber

Terran

Search...

NAVIGATION

Dashboard

Users

Activities

Roles

Permissions

Groups

Events

Edit

Delete

Edit event

update_event_field
↳ has_role(user.id,4) && equals_num(self.id,event.creator_id) && set(['name','location','date','all_day','start_time','end_time','url','flag_enabled'])
Edit events owned by the user.

Edit user

update_account_settings
↳ always()
Edit your own account settings.

quals_num(self.id,event.creator_id)

Delete events owned by the user.

A screenshot of a web browser displaying the glinno public admin interface for managing events. The URL in the address bar is `localhost/glinno/public/admin/events#&sort[table-events][notes]=asc&page[table-events]=1`. The page title is "Events". The top navigation bar includes links for PIP, Old, Apple, Apple Developer, iCloud, feedly, Twitch, link9313, GitHub, Spotify, Dev, School, and Games. The user is signed in as the root user, Nicholas Lauber.

The left sidebar, titled "NAVIGATION", contains links for Dashboard, Users, Activities, Roles, Permissions, Groups, and Events, with the Events link currently selected. A search bar is also present in the sidebar.

The main content area shows a table with one row of data:

Event	Note	Actions
Test Event	This is a test event.	Actions ▾

Below the table, there are navigation links: "« < 1 to 1 of 1(1) > »" and a "Jump to Page: 1 Show: 10" dropdown. A green "Create event" button is located at the bottom of the table area.

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localhost/glinno/public/admin/events#

YOU ARE SIGNED IN AS THE ROOT USER Nicholas Lauber

glinno > Events

Download CSV

Events

A listing of the

Events

Event

Test Event

Name

Location (Street Address)

Date

Start Time

End Time

URL

Notes

This is a test event.

All Day

Enabled

Update event

Cancel

Dashboard

Users

Activities

Roles

Permissions

Groups

Events

+ Create event

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The screenshot shows a web-based administration interface for managing events. The top navigation bar includes links for PIP, Old, Apple, Apple Developer, iCloud, feedly, Twitch, link9313, GitHub, Spotify, Dev, School, Games, and a plus sign for new items. The user is signed in as the root user, Nicholas Lauber. The main content area is titled 'Event' and contains fields for Name (Test Event), Location (The Slowdown, Omaha, NE), Date (2017-04-04), Start Time (11:00:00), End Time (12:00:00), URL (https://theslowdown.com), and Notes (This is a test event). There are checkboxes for 'All Day' and 'Enabled'. At the bottom are 'Update event' and 'Cancel' buttons. The sidebar on the left lists Navigation items: Dashboard, Users, Activities, Roles, Permissions, Groups, and Events, with Events currently selected. A search bar is also present in the sidebar. The footer includes copyright information for glinno 2017 and links to Almsaeed Studio, UserFrosting, Terms and Conditions, and Privacy Policy.

Testing

- Test features as added
 - Complete a feature before moving to the next
- Time Consuming
 - Ensured features were functional
- Only deployed in test environment
 - Unsuccessful attempts to deploy to Heroku Free Tier