# INF 5750

Claus Bornich
Haimanot Tekie
Ghada Ali Shommo

# Backup screenshots

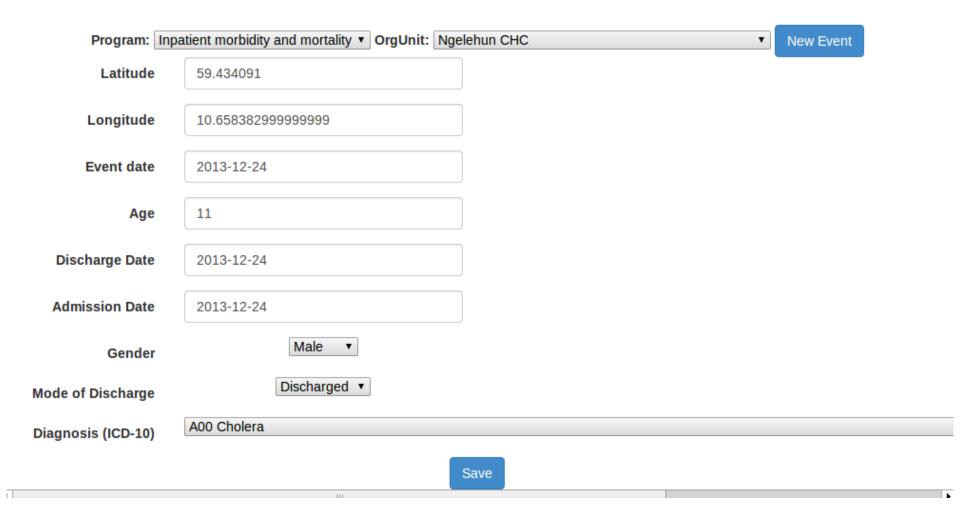apps.dhis2.org/apps/commitedversin2//index.html

# Mandalorian Geo

Map | Satellite

http://apps.dhis2.org/dev/api/events/zTo7wallJ

Org Unit: DiszpKrYNg8

Event Date: 2013-12-24 00:00:00.0

EStored By: admin

Program: eBAyeGv0exc

Lat: 59.434091

Long: 10.658382999999999

Diagnosis: A00 Cholera

Finland

Iceland

Sweden

Norway

Russia

United

Google

Terms of Use

*Hint: right-click on map to set location.*

**Period:** 2013-11-01 | 2013-12-24 | Show Events | Set My Location

| Orgunit: | DiszpKrYNg8 | Program: | eBAyeGv0exc | | | |
|---|---|---|---|---|---|---|
| Lat | Long | Diagnosis | Age | Gender | Admission | Discharge |
| 0 | 0 | A029 Salmonella infection, unspecified | 19 | Female | | |
| 0 | 0 | A029 Salmonella infection, unspecified | 19 | Female | | |
| 0 | 0 | C108 Overlapping lesion of oropharynx | 23 | Male | | |
| 0 | 0 | A001 Cholera due to Vibrio cholerae 01, biovar eltor | 23 | Female | | |
| 0 | 0 | A029 Salmonella infection, unspecified | 19 | Female | | |
| 0 | 0 | A00 Cholera | 33 | Male | | |
| 0 | 0 | B50 Plasmodium falciparum malaria | 123 | Male | | |

Hint: right-click on map to set location.

**Period:** `2013-11-01` `2013-12-24` [Show Events] [Set My Location]

| Orgunit: | DiszpKrYNg8 | Program: | eBAyeGv0exc | | | | |
|---|---|---|---|---|---|---|---|

| Lat | Long | Diagnosis | Age | Gender | Admission | Discharge |
|---|---|---|---|---|---|---|
| 0 | 0 | A029 Salmonella infection, unspecified | 19 | Female | | |
| 0 | 0 | A029 Salmonella infection, unspecified | 19 | Female | | |
| 0 | 0 | C108 Overlapping lesion of oropharynx | 23 | Male | | |
| 0 | 0 | A001 Cholera due to Vibrio cholerae 01, biovar eltor | 23 | Female | | |
| 0 | 0 | A029 Salmonella infection, unspecified | 19 | Female | | |
| 0 | 0 | A00 Cholera | 33 | Male | | |
| 0 | 0 | B50 Plasmodium falciparum malaria | 123 | Male | | |
| 0 | 0 | D100 Lip | 19 | Female | | |
| 0 | 0 | C101 Anterior surface of epiglottis | 23 | Male | | |
| 0 | 0 | A029 Salmonella infection, unspecified | 19 | Female | | |
| 0 | 0 | A029 Salmonella infection, unspecified | 19 | Female | | |
| 0 | 0 | A029 Salmonella infection, unspecified | 19 | Female | | |
| 0 | 0 | A029 Salmonella infection, unspecified | 19 | Female | | |
| 0 | 0 | A029 Salmonella infection, unspecified | 19 | Female | | |
| 0 | 0 | B16 Acute hepatitis B | 18 | Male | | |
| 59.434091 | 10.658382999999999 | A00 Cholera | 11 | Male | | |
| 0 | 0 | A029 Salmonella infection, unspecified | 19 | Female | | |

**Program:** Inpatient morbidity and mortality ▼  **OrgUnit:** Ngelehun CHC ▼  New Event

**Latitude**

59.434091

**Longitude**

10.658382999999999

**Event date**

2013-12-24

**Age**

11

**Discharge Date**

2013-12-24

**Admission Date**

2013-12-24

**Gender**

Male ▼

**Mode of Discharge**

Discharged ▼

**Diagnosis (ICD-10)**

A00 Cholera

Save

# The scope and what each group member has done

- Weekly Face-To-Face Meetings.
- All group members installed local DHIS2 databases and participated in coding and testing.
- Everyone studied the DHIS2 documentation for the API
- We investigated the DHIS2 API early on testing retrieving HTML, XML and JSON data and discussed together how to design the app and the functionality and features of DHIS2
- Group members were not afraid to make changes to each-other's code and some learning was involved with making sure not to break code that others have written and using git properly to merge with previous changes.

# Claus

- Created the initial project with Haimanot using bootstrap and set up the github repository
- Implemented the google map and custom markers showing event locations, right click for position and setting current position
- Researched and Implemented the JSON to retrieve events
- Display Events in List for a given period, program and orgUnit
- Save event data using JSON using map location
- Testing against apps.dhis2.org/demo and then /dev as well as local DHIS2.

# Claus

- Looked into cross-origin resource sharing (CORS) in relation to the mobile app.
- Claus looked into how we might develop a phone app but was not convinced it made sense as we developed the APP to live inside DHIS2 and so would be accessible on a mobile device through a browser.
- Group members were not afraid to make changes to each-other's code and some learning was involved with making sure not to break code that others have written and using git properly to merge with previous changes.

# Haimanot

- Suggested useful collaboration tools, such as Trello.com to manage task assignment and using a google document logbook for the group to track progress.
- Testing against apps.dhis2.org/demo and then /dev as well as local DHIS2.
- Creating the form UI with twitter bootstrap
- Making it dynamic based on the chosen program

# Ghada

- Researched retrieving program data using DHIS 2 API
- Testing against apps.dhis2.org/demo and then /dev as well as local DHIS2.
- Looked on the insights of DHIS API's and how to get data from json files and create dynamic form.
- Trying to look on the insight of how to implement the app as an android app.I tested the actual running app on the phone.

# The scope and what each group member has done

- Haimanot suggested a number of useful collaboration tools, such as Trello.com to manage task assignment and using a google document logbook for the group to track progress.
- Group agreed on using git as repository and Claus set this up for the group on github.
- Haimanot and Claus worked together using bootstrap and the manifest to get the initial sourcebase going.
- Claus was responsible for the google map (location selection, markers, zoom level, etc.), as well as the code to retrieve and store events with location and display events for a selected program, orgUnit and period as well as markers for those events and coded and tested this and other functionality testing against apps.dhis2.org/demo and then /dev as well as local DHIS2.
- Ghada was responsible to find ways to get the information we needed to get a dynamic form up based on the chosen program. So she studied the API in detail, and this was helpful when writing the code.
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- Claus also looked into using angular by looking at Lars' example app, but decided that we did not need it for our relative simple functionality and decided to stick with building our app from bootstrap.
- Haimanot and Ghada worked together on retrieving the program fields for a selected program, displaying these and then using Claus' JSON code to save the events.
- Haimanot was able to contribute her previous knowledge on web development, Claus wrote a lot of code and kept communication going through updating the logbook and email
- Claus looked into how we might develop a phone app but was not convinced it made sense as we developed the APP to live inside DHIS2 and so would be accessible on a mobile device through a browser.
- Claus looked into cross-origin resource sharing (CORS) in relation to the mobile app.
- Ghada experimented with android phone app code and both she and Haimanot also did their own custom JSON experiments while working to understand how to retrieve the DHIS2 program API data.
- Group members were not afraid to make changes to each-other's code and some learning was involved with making sure not to break code that others have written and using git properly to merge with previous changes.
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**The technologies and frameworks you've used.**

- Javascript
- JQuery
- Bootstrap
- Google Maps
- Git and Github
- Android Development Tools and Genymotion (experimenting only)

- Trello.com
- Google Docs
- DHIS 2 with postgresql
- Eclipse
- Firefox and Chrome
- RESTClient plugin
- JSONView plugin
- The course wiki

# Problems and issues you've met during development

- DHIS2 locations were not initially working so that caused some confusion.
- The development instance of DHIS2 was very unstable and often would not work and so delayed early testing and progress.
- A lot of time was spent on hard to figure out JQuery issues where RESTClient would work, but not the app code.
- Installing local DHIS 2 database worked for one group member, but required several installs for the rest due to strange problems and had difficulties running the installed app for unknown reasons.
- Learning to use git caused some code to be overwritten because of code changes not being merged.
- Fully understanding how the app would work with DHIS 2 in the early stages was a challenge and delayed start of design and coding.

**Any suggestions to improvements in DHIS2 APIs or other, including any changes you've had to do on DHIS2 code.**

- A reset to default button for the app settings page would have been nice.
- While some loadings go on backround it would have been nice to able to disable the page
- The layout could have been better

**Information about tasks you've done beyond the minimum expected. Things like mobile client, unit tests, build framework, innovative features etc.**

- Group members experimented with android app development, but was not included in final code.
  - Genymotion was used by some group members for faster emulation testing.
  - Testing on actual android phone was also tried.
- Created custom markers in the form of pins with detailed event data and link the XML data available on clicking the pin.
- Able to set location based on both your location and right clicking the google map.
- Populated the orgUnit selector based on the selected program.
- Event fields dynamically generated from the selected program.