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GitHub Username: **daniellehrner**

Newsgroups NDY

Description

(Usenet) Newsgroups are older than the World Wide Web itself. Since decades they are used for people to meet online and discuss every possible topic you can think of. Although the use of Newsgroups has significantly decreased in the last years, they are not dead yet! Newsgroup NDY brings Newsgroups on your phone and maybe will help to revive them.
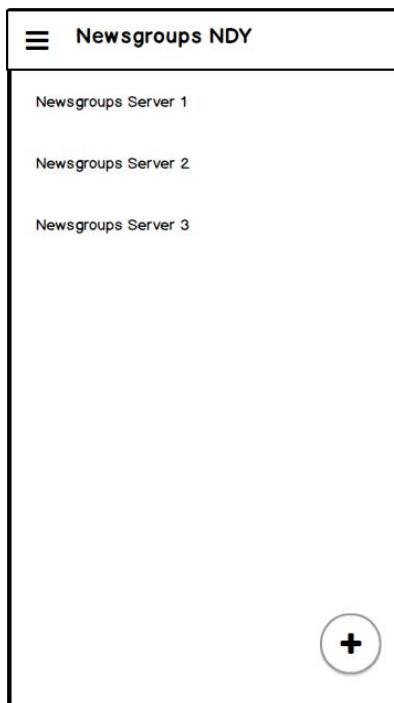
Intended User

An intended user is everybody that wants to participate in Newsgoups from their phones. Also my former university still used them as their main communication between students.

Features

- Read from Newsgroups
- Write to Newsgroups
- Save Newsgroups messages on the phone for offline usage

User Interface Mocks

Main screen

The main screen shows all the Newsgroups Servers the user has added. A click on one of the servers opens the 'Group screen'. A click on the FAB opens the 'Add server screen'.
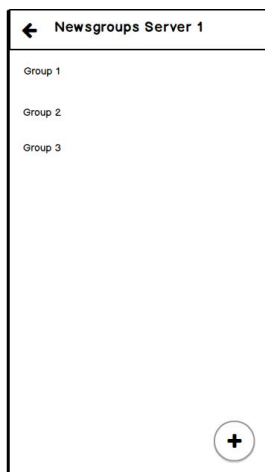
Add server screen

Add Server

Server Name
Example Server

URL
news.example.com

Your Name
Jane Doe

Your email
jane.doe@example.com

OK   Cancel

This screen consists of four text fields to enter the necessary data to add a new server.
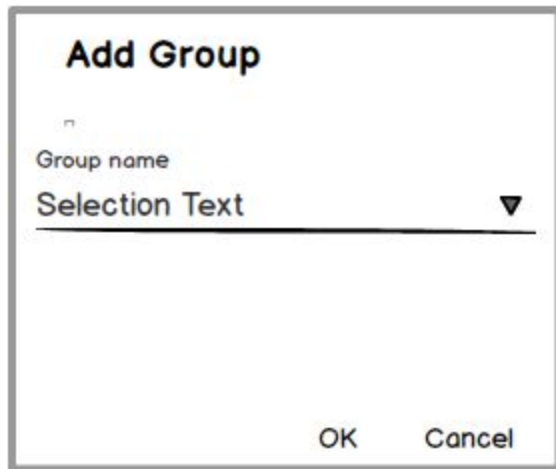
Groups screen

← Newsgroups Server 1

Group 1

Group 2

Group 3

+

The Groups screen shows all the subscribed groups of a Newsgroup server. A click on one of the groups opens the 'Topic screen'. A click on the FAB opens the 'Add group screen'.
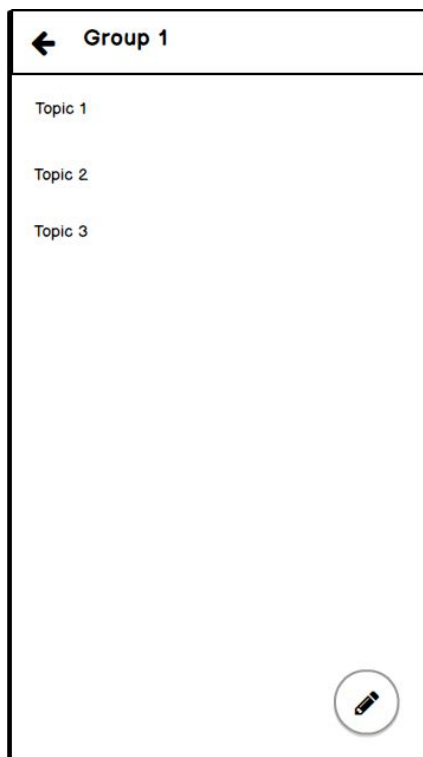
Add Group screen

Add Group

Group name

Selection Text ▼

OK   Cancel

The groups are defined by the server and can't be changed by the user. So the user is shown a selection menu for the groups.

Topic screen

← **Group 1**

Topic 1

Topic 2

Topic 3

The Topics screen shows all the topics of a group. A click on one of the topics opens the 'Message screen'. A click on the FAB opens the 'Create topic screen'.
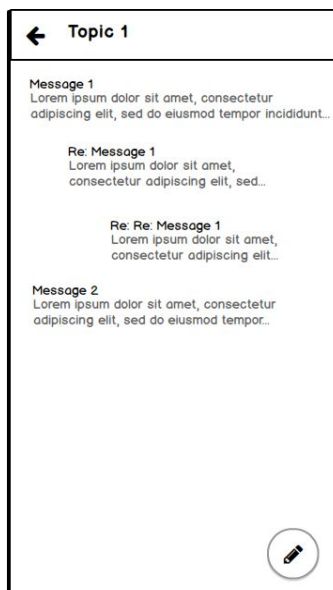
Create topic screen

A topic can not be empty. The user has to enter a topic name and a message.

Message screen

In this screen are all the messages of a topic are shown. The responses to a message are indented to the right, to visualize the hierarchy of the messages. A click on one of the messages opens the 'Message Detail screen'. A click on the FAB opens the 'New message screen'.
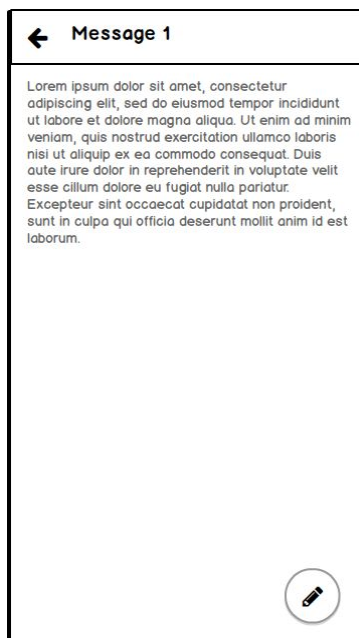
New message screen

A message can be entered and is then sent to the server.

Message detail screen

The full message is shown. A click on the FAB opens the 'New message screen' to write a response to the shown message.

Message screen on a tablet
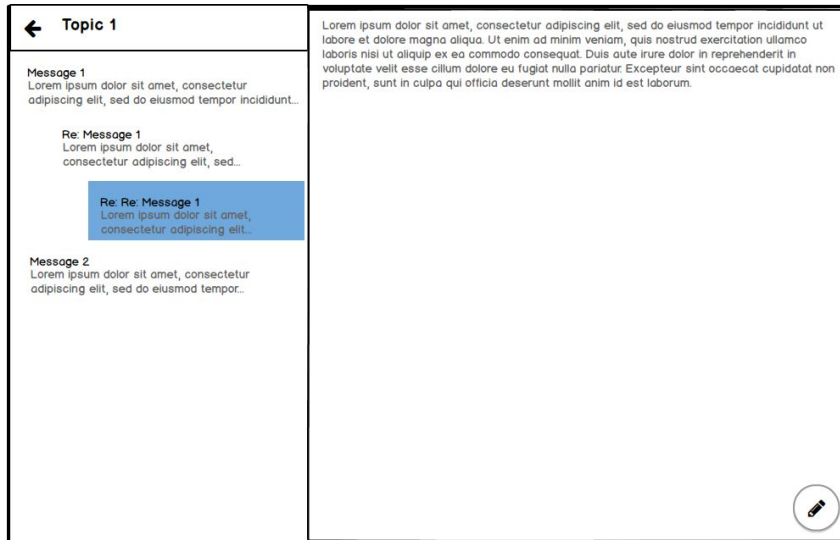
On a tablet the message screen and the message detail screen are combined in a Master-Detail-View.

Key Considerations

How will your app handle data persistence?

The data will be stored in a SQLite database and a Content Provider will be used to share data with other apps.

Describe any corner cases in the UX.

Newsgroups are similar to emails in the way that you can respond not only to the newest post, but also to every older post. So you can have a very long chain of responses (theoretically infinite). In other words the message tree can have a very big depth and breadth at the same time. To display this, the 'Message screen' must not only allow to swipe up or down, but also to swipe left and right, to see all possible responses.

Describe any libraries you'll be using and share your reasoning for including them.

- Apache Commons Net NNTP: library for the NNTP protocol, which is used to communicate with Newsgroups servers
- Butterknife: View injection
- Android design support library: Material design
- Dagger2: Dependency injection

- JUnit: Unit tests
- Mockito: Mock objects for instrumentation tests

Next Steps: Required Tasks

Task 1: Project Setup

- Create new Android project with Master-/Detail Flow
- Configure libraries

Task 2: Implement UI for Each Activity and Fragment

- Build UI for the Newsgroup Server Overview
- Build UI for the Newsgroup Groups Overview
- Build UI for the Newsgroup Topics Overview
- Build UI for the Newsgroup Messages Overview
- Build UI for the Message Details

Task 3: Fetch data from Newsgroup Server

- Write a Java class to connect to a server and receive the groups, topics and messages

Task 4: Post message to Newsgroup Server

- Post a reply to a Newsgroup server

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