

Software Engineering Lab

A15

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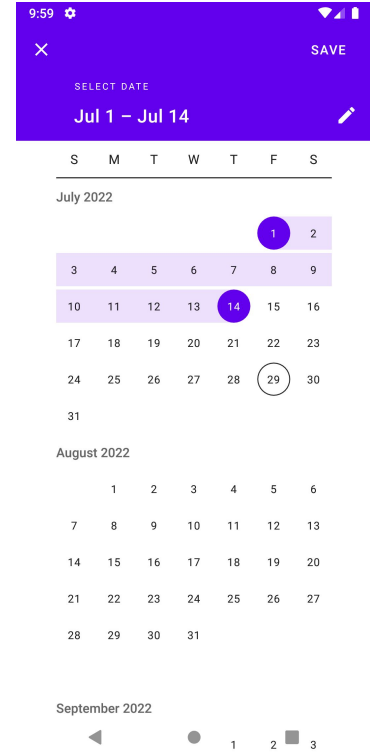
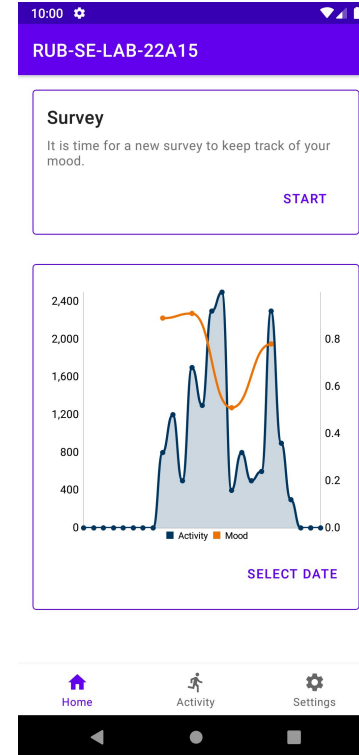
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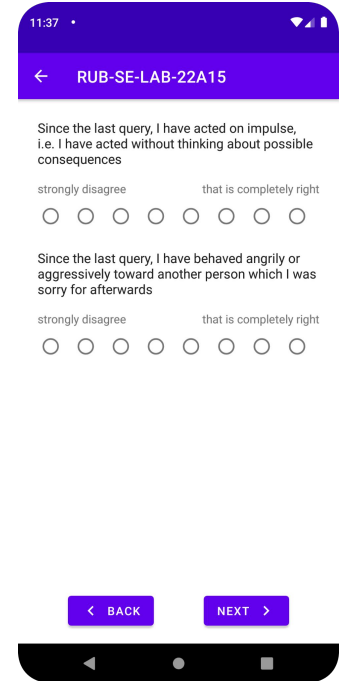
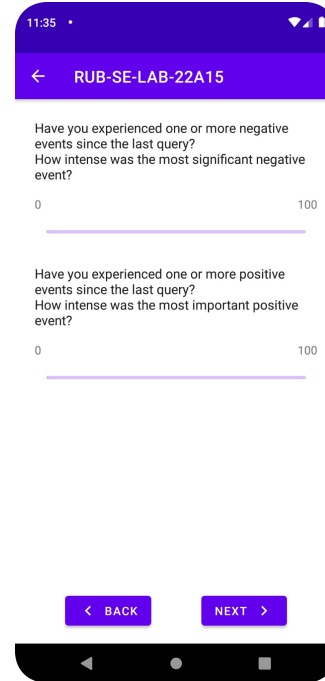
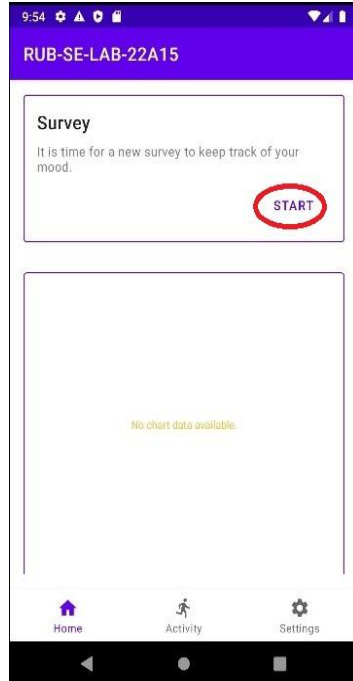
Product Pitch

Home Screen

- Survey Start
- Activity Statistics
 - Based on recorded data and survey results
 - Selectable Time Range
 - Vertical zoom of the diagram



Survey/ Mood Recording



Survey/ Mood Recording

2:53

RUB-SE-LAB-22A15

Where are you now?

Location

Home

Work

Sport

Hobby

Shopping

Visit

Other

< BACK

NEXT >

8:41

RUB-SE-LAB-22A15

Where are you now?

Location

Home

Are you alone at the moment?

☒ No ☐ Yes

What kind of people are you surrounded by at the moment

Surrounded

Stranger

When you think of the people you are surrounded, how does the following statement apply? I do not like these people!

does not apply at all is completely true

< BACK

NEXT >

11:40

RUB-SE-LAB-22A15

If you want you can add a note to your record

Note

CLEAR

Do you want to save your survey?

DECLINE SAVE

< BACK

SAVE

11:41

RUB-SE-LAB-22A15

If you want you can add a note to your record

Note

Why do you want to discard the survey?

☐ I was stuck on negative thoughts and could not disengage from them

☐ I am thinking about my feelings

☐ I am thinking about my problems

☒ Other

CANCEL DISCARD

< BACK

SAVE

Activity Recording

- Active activity recording
 - activity name
 - gps opt in
 - start/ stop
 - clock
- Add passed activity
 - activity name
 - date selection

The screenshot displays a mobile application interface with a purple header bar. The header contains the time '10:01', system icons, and the text 'RUB-SE-LAB-22A15'. Below the header, there are two main sections. The first section, titled 'Active Activity Recording', features a text input field with a running person icon and the text 'Running'. Below this is a toggle switch for 'Enable Location?' which is turned on, and a timer showing '00:09'. At the bottom of this section are two buttons: a grey 'START' button with a play icon and a purple 'STOP' button with a square icon. The second section, titled 'Add Activity', has a text input field with a running person icon and the text 'Activity'. Below this is a text input field with a calendar icon and the text 'Date'. At the bottom of the screen is a navigation bar with three icons: a house icon labeled 'Home', a running person icon labeled 'Activity', and a gear icon labeled 'Settings'.

10:01 RUB-SE-LAB-22A15

Active Activity Recording

Activity Running

Which activity do you want to track?

Enable Location? ☒

00:09

START STOP

Add Activity

Add here an already finished activity

Activity

Which activity do you want to add?

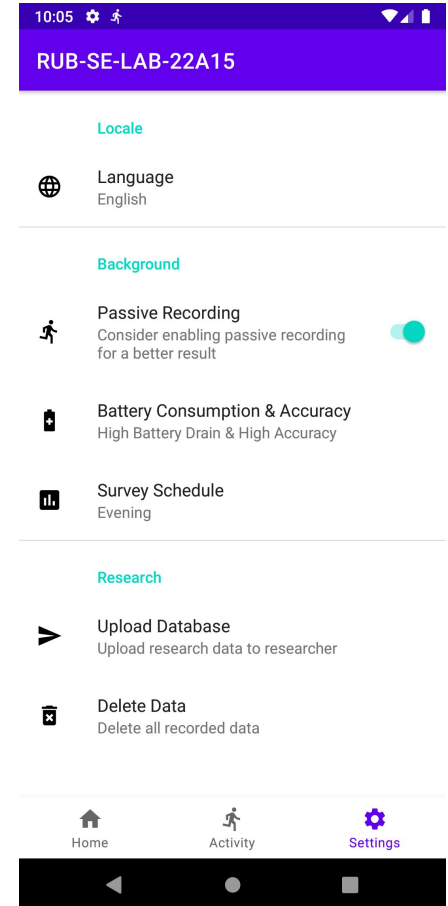
Date

When was your activity you want to add?

Home Activity Settings

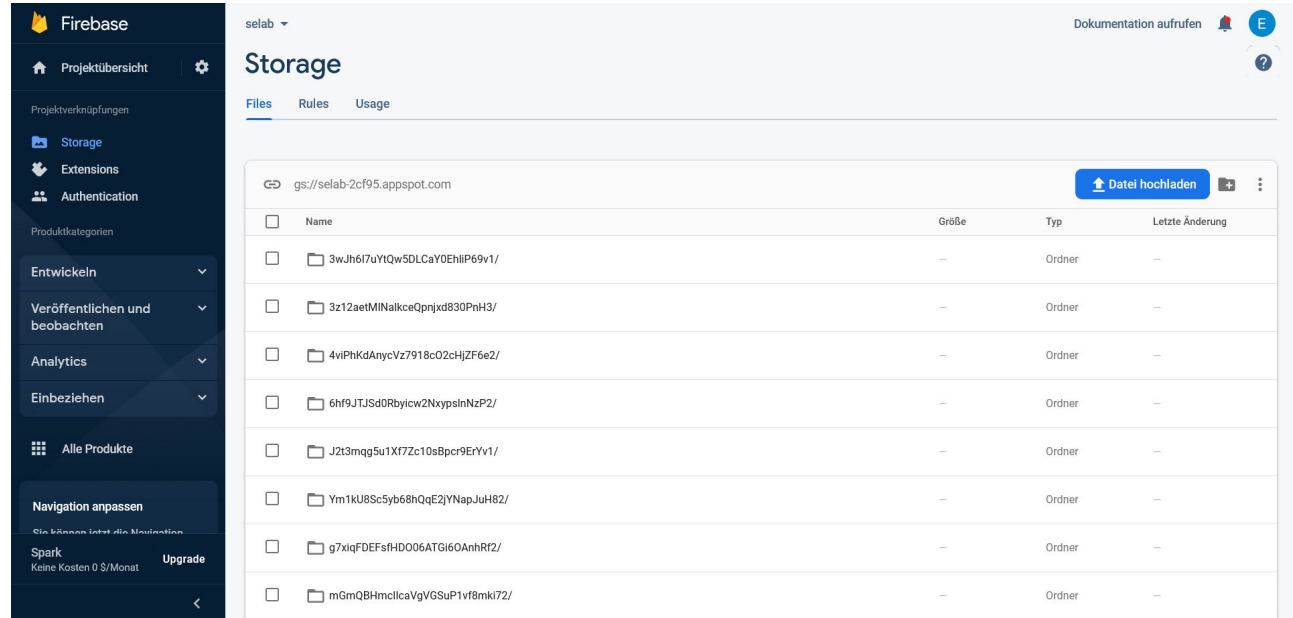
Preferences

- Opt in passive recording
- Battery Drain/ Accuracy Drop Down Menu
- Survey schedule drop down menu
- Upload data pseudonymized to researcher (firebase)
- Delete all recorded data (local)



Firestore cloud storage

- Pseudonymized

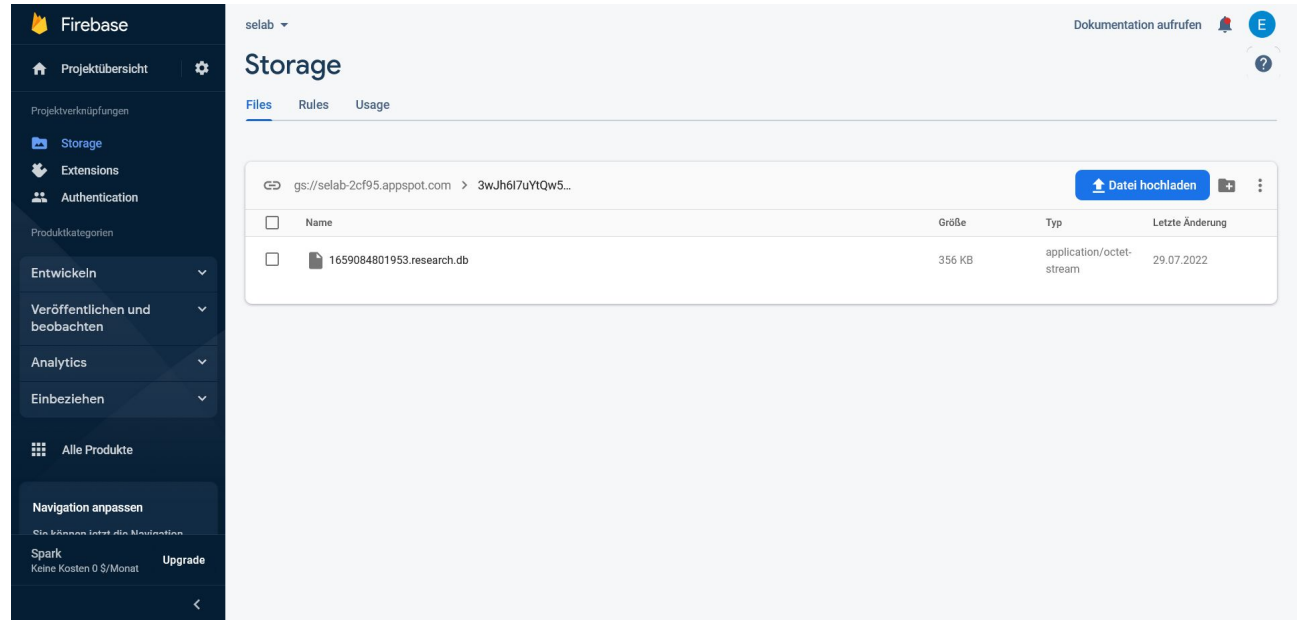


The screenshot displays the Firebase Storage console interface. On the left is a dark sidebar with navigation options: Projektübersicht, Storage, Extensions, Authentication, Produktkategorien, and a list of product categories (Entwickeln, Veröffentlichung und beobachten, Analytics, Einbeziehen, Alle Produkte, Navigation anpassen). The main content area is titled 'Storage' and shows the path 'gs://selab-2cf95.appspot.com'. A table lists several folders, each with a checkbox, a name, a size, a type, and a last update time. The folders are pseudonymized with long alphanumeric strings. A 'Datei hochladen' button is visible in the top right of the table area.

<input type="checkbox"/>	Name	Größe	Typ	Letzte Änderung
<input type="checkbox"/>	3wJh617uY1Qw5DLCaY0EhIP69v1/	—	Ordner	—
<input type="checkbox"/>	3z12aetMINalkceQpnjxd830PnH3/	—	Ordner	—
<input type="checkbox"/>	4viPhKdAnycVz7918cO2cHJZF6e2/	—	Ordner	—
<input type="checkbox"/>	6hf9JTJSd0Rbyicw2NxypslNzP2/	—	Ordner	—
<input type="checkbox"/>	J2t3mqg5u1Xf7Zc10sBpcr9ErYv1/	—	Ordner	—
<input type="checkbox"/>	Ym1kU8Sc5yb68hQqE2jYNapJuH82/	—	Ordner	—
<input type="checkbox"/>	g7xiqFDEFsfHDO06ATGI6OAnhRf2/	—	Ordner	—
<input type="checkbox"/>	mGmQBHmclcaVgVGSuP1vf8mki72/	—	Ordner	—


Firestore cloud storage

- Sqlite database file
- Raw data from recording



The screenshot displays the Firebase Storage interface. On the left is a dark sidebar with the 'Firebase' logo and navigation links: 'Projektübersicht', 'Storage', 'Extensions', and 'Authentication'. Below these are sections for 'Produktkategorien' (Entwickeln, Veröffentlichen und beobachten, Analytics, Einbeziehen) and 'Alle Produkte'. At the bottom of the sidebar are 'Navigation anpassen', 'Spark' (Keine Kosten 0 \$/Monat), and an 'Upgrade' button.

The main panel is titled 'Storage' and shows the path 'gs://selab-2cf95.appspot.com > 3wJh6l7uYtQw5...'. It features a 'Datei hochladen' button and a table of stored files.

<input type="checkbox"/>	Name	Größe	Typ	Letzte Änderung
<input type="checkbox"/>	 1659084801953.research.db	356 KB	application/octet-stream	29.07.2022

Learning / Process Reflection

What have we learned?

Programming, Libraries and Tools

- Android Architecture
 - Sensors
 - Workers
 - Scheduler
 - Notifications
- Database programming and data storage
- Material Design
 - <https://material.io/components?platform=android>
- MPAndroidChart
 - <https://github.com/PhilJay/MPAndroidChart>

Programming, Libraries and Tools

- Working with Git and GitHub
 - Source code distribution
 - Version control
 - Handling merge conflicts
 - creating pull requests
- Using Android Studio effectively
 - Refactoring
 - Debugging
- Firebase
 - Authentication
 - Security Rules
 - Cloud storage
- Google Docs for collaborative working on assignments
- Creating UML diagrams with draw.io

Soft Skills and Management

- Working in a team
- Time management
- Task distribution
- Dealing with disagreements
- Arranging regular appointments

Thank you for your attention