

Interviews Notes

P1

Receive a lot of handwritten assignments every semester

Need to digitize responses to archive, check plagiarism

Handle messy handwriting, academic jargon

Batch processing of student submissions

Most OCR tools aren't trained on Arabic scripts

P2

Take handwritten lecture notes in Arabic

Want to convert notes to digital text before exams

Work well even if notes are messy or written quickly

Apps misunderstand many words due to unclear handwriting

No apps explicitly mention Arabic handwriting

P3

Need digitized notes for thesis

OCR apps confuse me shorthands & abbreviations

P4

Digitizing crucial for preservation & searchability

Work with old Arabic handwritten letters, official documents

Support older handwriting styles

Bulk processing for archives

Historical handwriting styles hard to interpret

P5

Recognize casual notes/short phrases

Casual handwriting isn't neat, OCR struggles

No apps explicitly mention Arabic handwriting

Archivists as users

Digitizing
crucial for
preservation
&
searchability

Work with old
Arabic
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Recognize
casual
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Support
older
handwriting
styles

Work well
even if notes
are messy or
written quickly

Handle messy
handwriting,
academic
jargon

Accuracy Improvements

Students as users

Take
handwritten
lecture notes
in Arabic

Need
digitized
notes for
thesis

Want to
convert notes
to digital text
before exams

Handwriting Quality

Apps
misunderstand
many words
due to unclear
handwriting

Historical
handwriting
styles hard
to interpret

Casual
handwriting
isn't neat, OCR
struggles

Educators as users

OCR apps
confuse me
shorthands &
abbreviations

Receive a lot of
handwritten
assignments
every semester

Need to
digitize
responses to
archive, check
plagiarism

Batch Processing

Batch
processing
of student
submissions

Bulk
processing
for
archives

Arabic Limitations

Most OCR
tools aren't
trained on
Arabic scripts

No apps
explicitly
mention
Arabic
handwriting

No apps
explicitly
mention
Arabic
handwriting

Features Ideations

editing the
recognized
text

Sharing
recognized
text

Cropping
and
rotating
the image

Export text
into
document
pdf/word

Share into
different
platforms

batch
processing
as premium
feature

Handwriting
Style Selector:
(historical,
academic,
etc.)

Image
processor to
clean
background
and noise

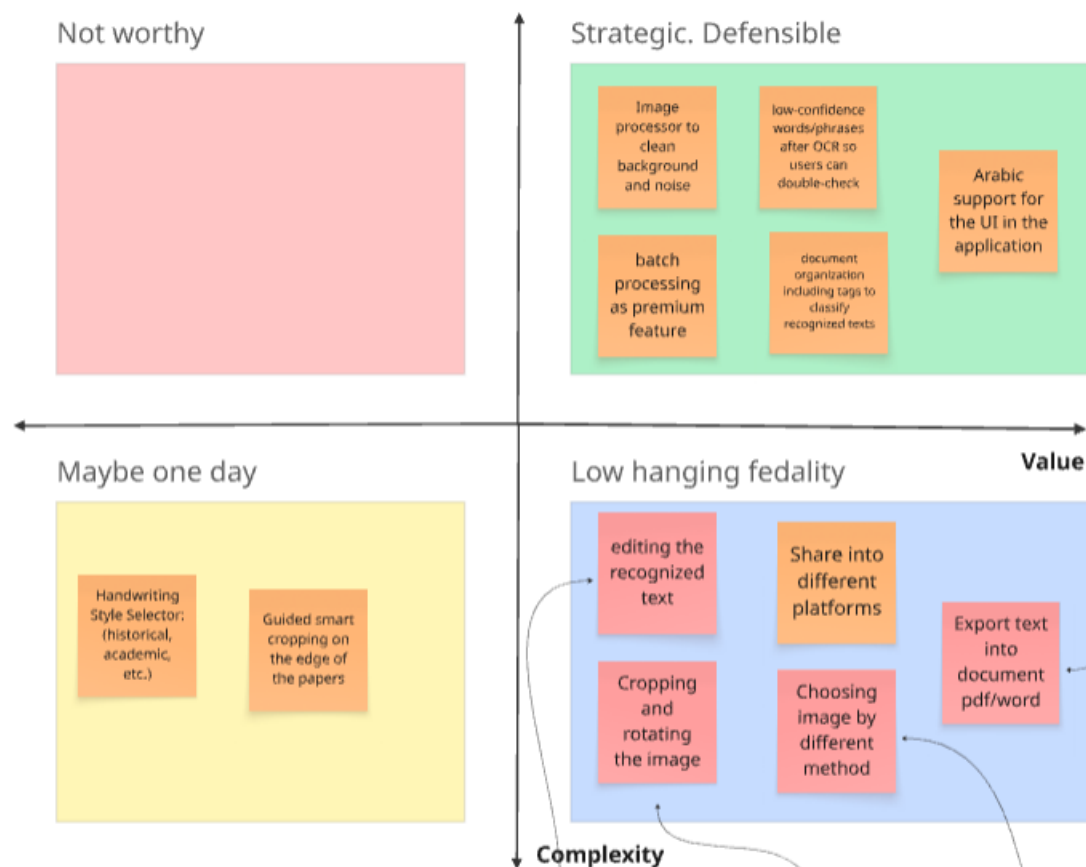
low-confidence
words/phrases
after OCR so
users can
double-check

Guided smart
cropping on
the edge of
the papers

document
organization
including tags to
classify
recognized texts

Arabic
support for
the UI in the
application

Features Prioritization



Users often need to use OCR outputs in reports, assignments, or share them professionally.

Based on user research, OCR is not always perfect, users need to correct errors.

Common expectation in scanning and document apps.

Different users have different workflows, some scan with their camera, others upload saved images.

Paper Sketches - Iteration 1

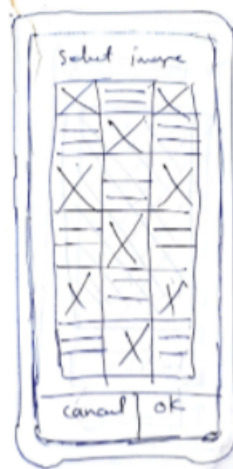
This is the main page, welcomes the user and asks them to chose the Image



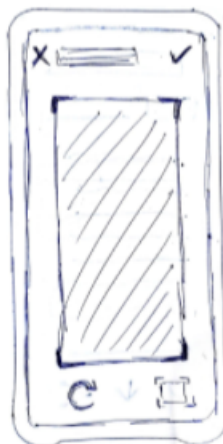
Tells the user to ensure good quality and light of the image, also give them choice (Gallery, Camera)



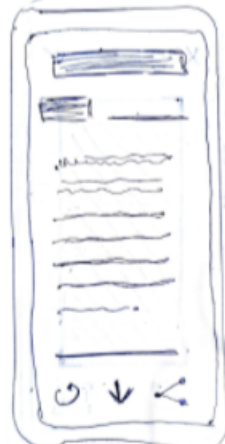
Shows the user their gallery and let them get back to chose from Camera



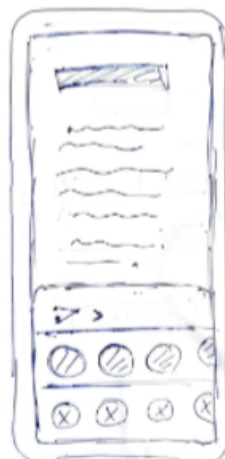
Shows the user their Selected Image and let them proceed or edit the selected image



The user is able to edit The selected image, whether by rotating or by resizing the image



Shows the user the recognized text, with options to share, download, rety



The user is able to share the text into diffrent platforms



The user is able to download the text as document with various extensions, or they could go back to main

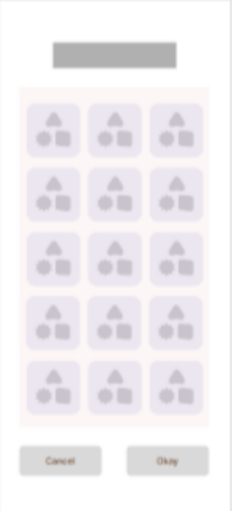
Prototype Link: [My Prototype Link](#)



Home Page



Select Image method



By Gallery



By Camera



Show selected Image
Edit selected image




Recognize text
main



Download text
with options

Usability Study

Usability Guide - V0



KhattTech - Design Sprint

Respondent Information

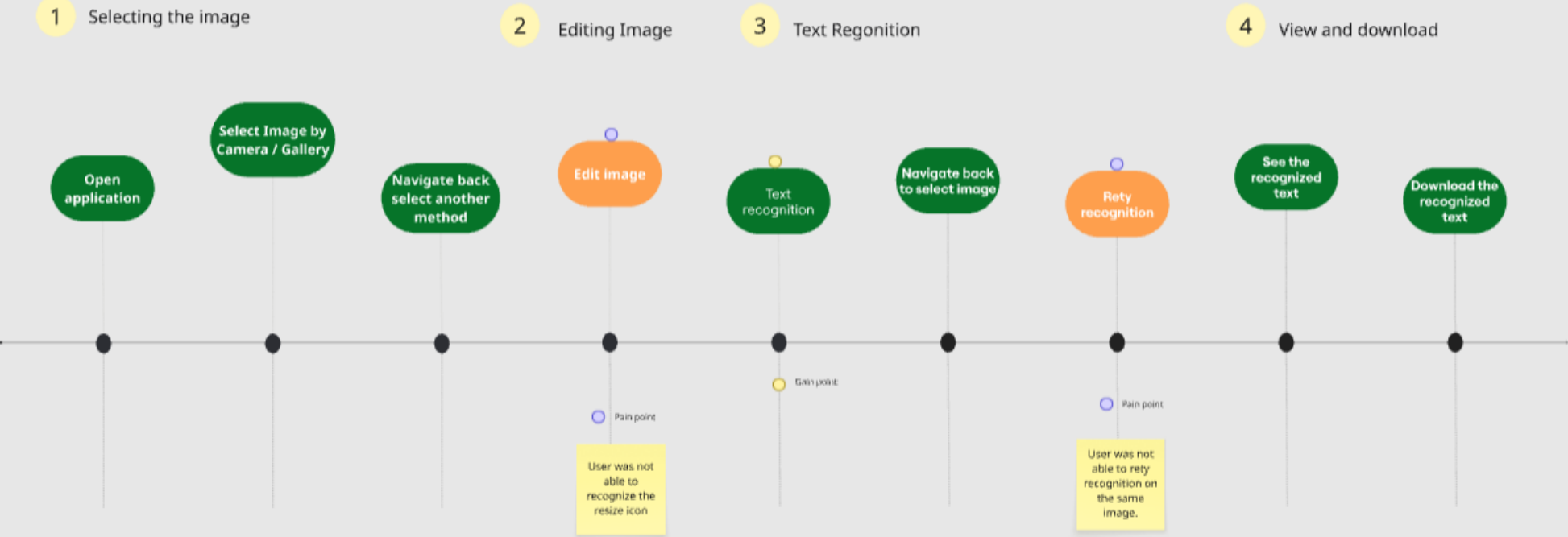
Respondent ID	Age / Gender	Location	Education
P000001	21 male years old	Cairo, Egypt	Master

Setup

- ☒ Discussion Guide Printed or a New File is Copied
- ☒ Remote Respondent Information is Filled In
- ☒ Prototype is open and running

Remote Session

- ☒ Session link created and shared with the respondent
- ☒ Recording button is clicked and recording
- ☒ If remote viewers: link shared with the team
- ☒ Screen sharing is activated and mouse control is granted



Usability Guide

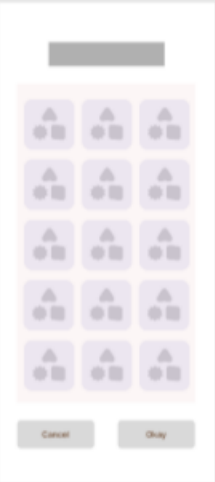
Prototype Link: [My Prototype Link](#)



Home Page



Select Image method



By Gallery



By Camera



Show selected Image



Edit selected image

changed Icons to more readable ones



Recognize text main

Added another action to select image



Download text with options