Cardzo – Document Tools App

Document Tools
&
EBookReader

Team

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Introduction

The Cardzo app will give the user pretty much every features regarding managing documents like converting, creating, viewing documents along with an epub reader to make it easy to read books from our smartphone device.

Project Objective

To create an interactive android app which provides :

- A Document Scanner to create pdfs from images
- Document tools like Convertor, Compressor, etc..
- Ebook Reader

What We Are Using?

- **Front-end**
  - Flutter
    - Mobile UI Development Framework by Google
    - Primary language : Dart
- **Back-end**
  - Python Django
    - Web Development Framework
    - Primary Language : Python
- **Model**
  - Incremental Model

Incremental Model

- Requirements divided into multiple standalone modules
- Every subsequent release of the module adds function to the previous release
- Errors are easy to be recognized.
- Simple to manage risk because it handled during its iteration
- Used in a project has a lengthy development schedule.

Flutter

- Flutter is an open source Google mobile UI framework
- Flutter is free
- Cross – platform development
- Better looking UI
- Uses Dart as Primary language

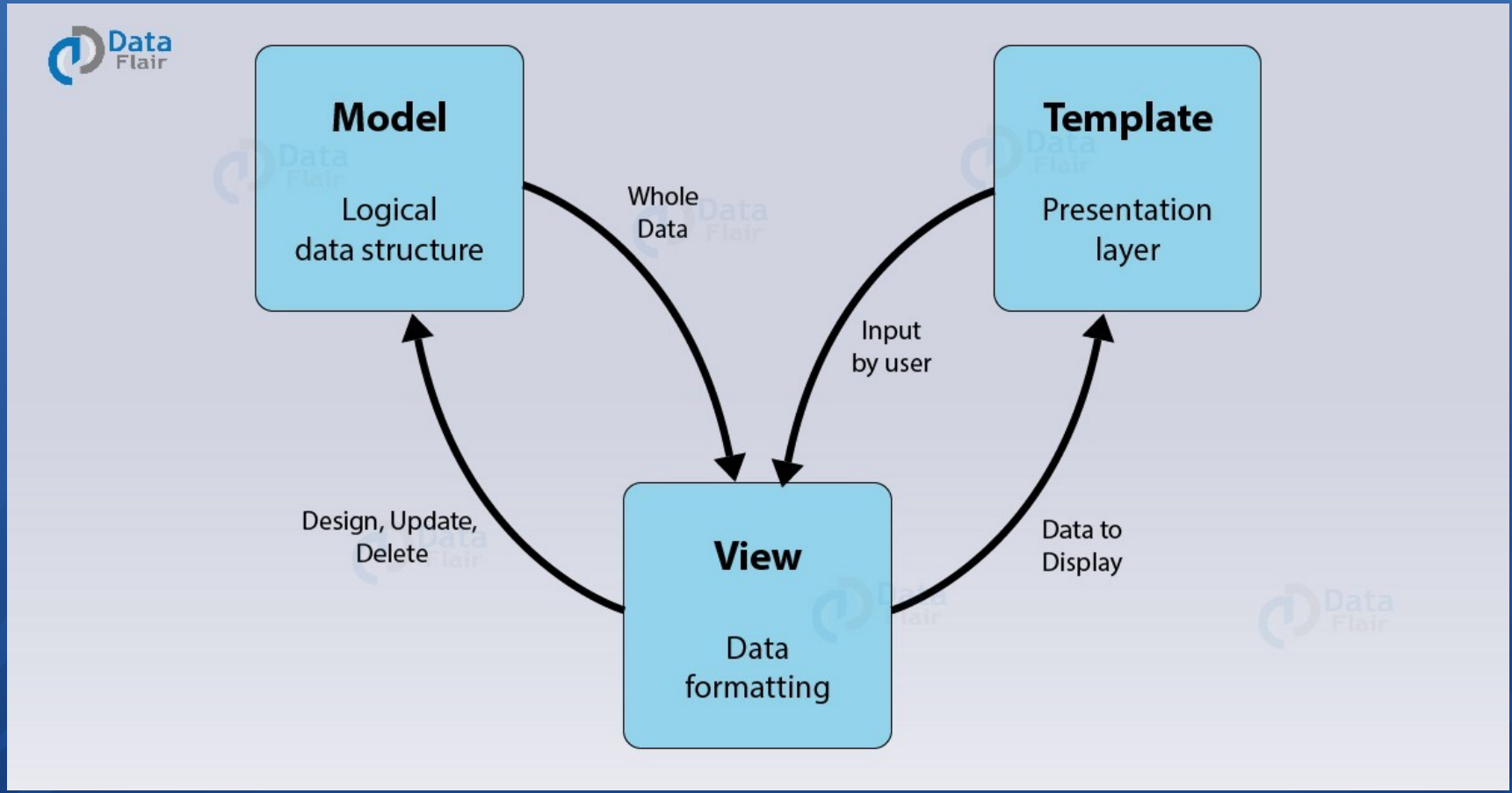
Dart

- Developed by Google
- C style syntax
- Used for developing apps for mobile,web, etc..
- Can be compiled to native code or javascript

Python Django

- Django is a free and open-source web framework
- Based on Python language
- Uses Model-Template-View architecture
- Based on DRY (Don’t Repeat Yourself) concept

Model-Template-View



Python

- Open Source and Community Development
- Extensive Support Libraries
- Learning Ease and Support Available

DocScanner

Functionalities :

- Creating a document from given image
- Displaying PDF Documents
- Allow User to share the created documents

DocTools

Functionalities :

- Compress Documents
- Convert Documents to Another Format
- PDF Splitter and Joiner

EPUB

- EPUB is an e-book file format
- Uses .epub extension
- EPUB is supported by many e-readers
- Archive file consisting of XHTML files carrying the content, along with images and other supporting files.

EReader

Functionalities :

- Display Epub formatted Ebooks
- Provides Night mode
- Other functions like adjusting scroll and font size

Translator Module

Functionalities :

- Getting Text from Typed Images using OCR
- Translation of the text to other languages

Software Requirements

- **Platform :**
  - Android
- **Operating System :**
  - Android – Version 6.0 above (API 23 above)
- **Hardware :**
  - Smartphone should have camera
  - at least 2GB RAM

Software Requirements

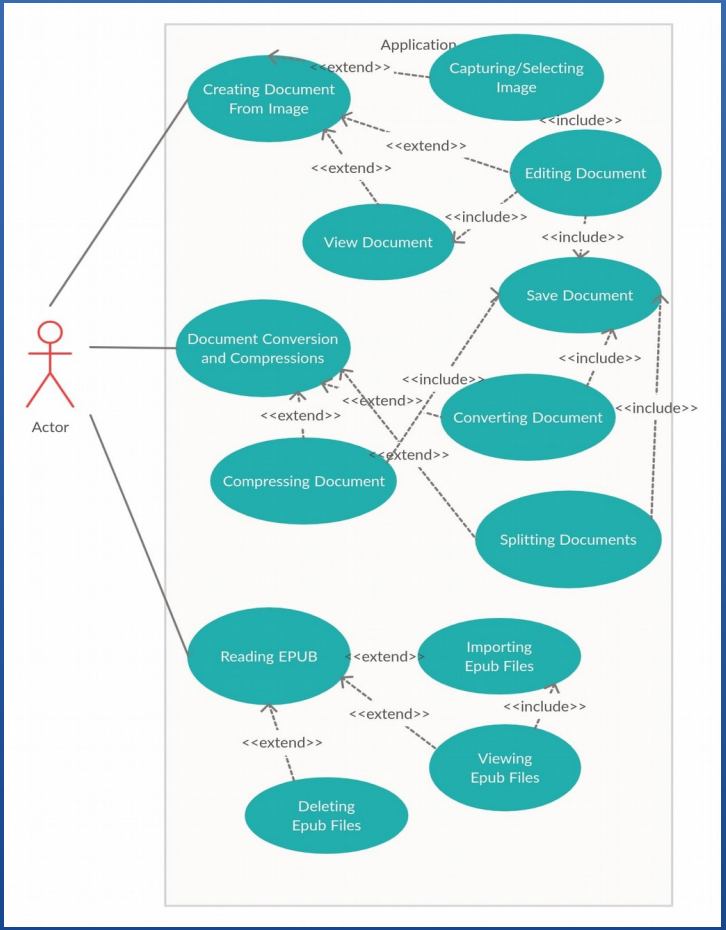
Developer Side

- Android SDK 27 (Android 8.1)
- Android Studio / VS Code
- Flutter SDK

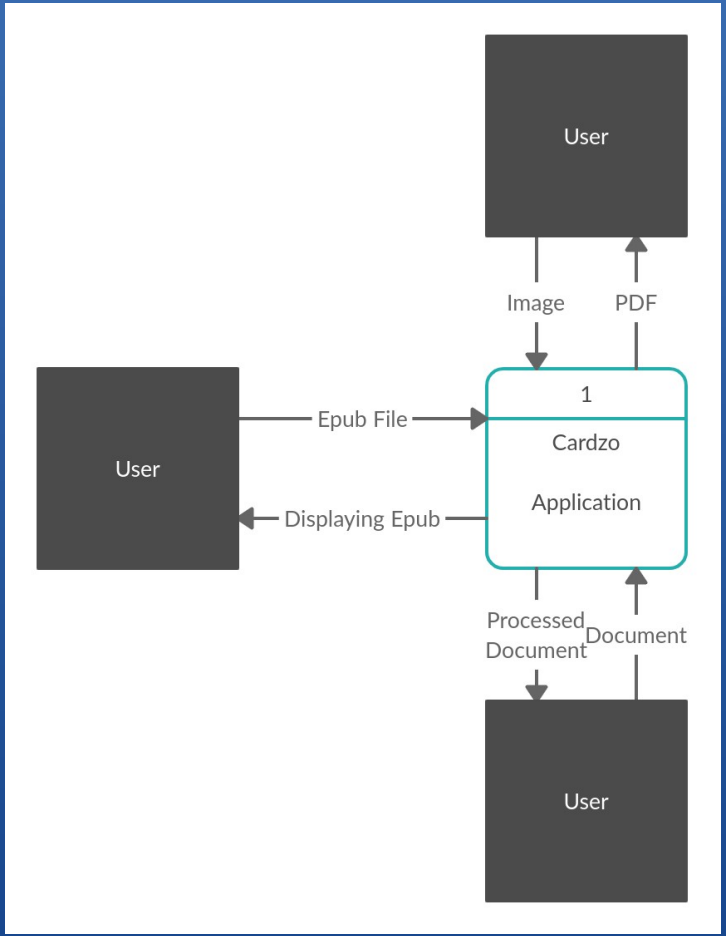
  Hardware Permissions Needed

  - Camera Access
  - Network Access

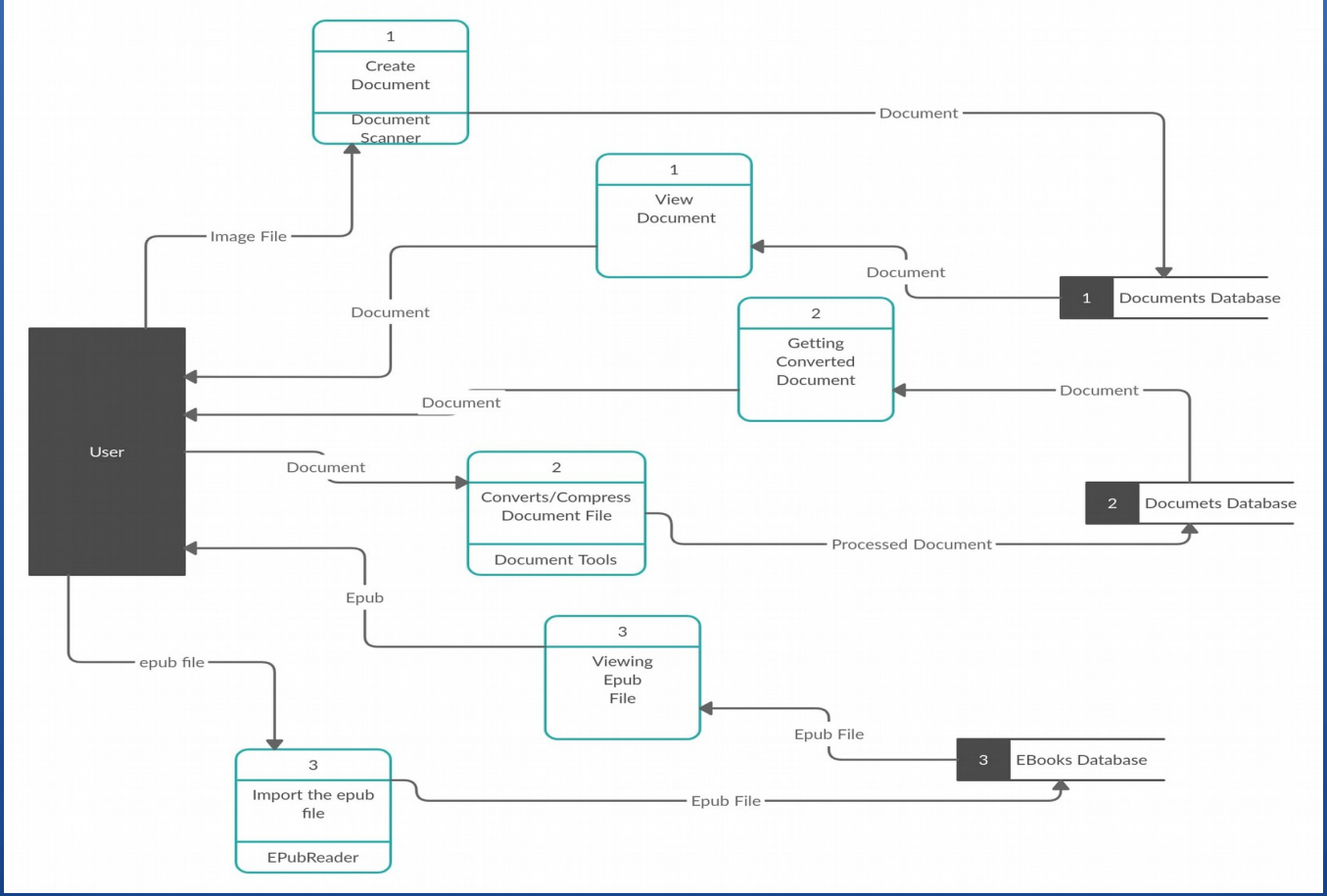
UseCase Diagram



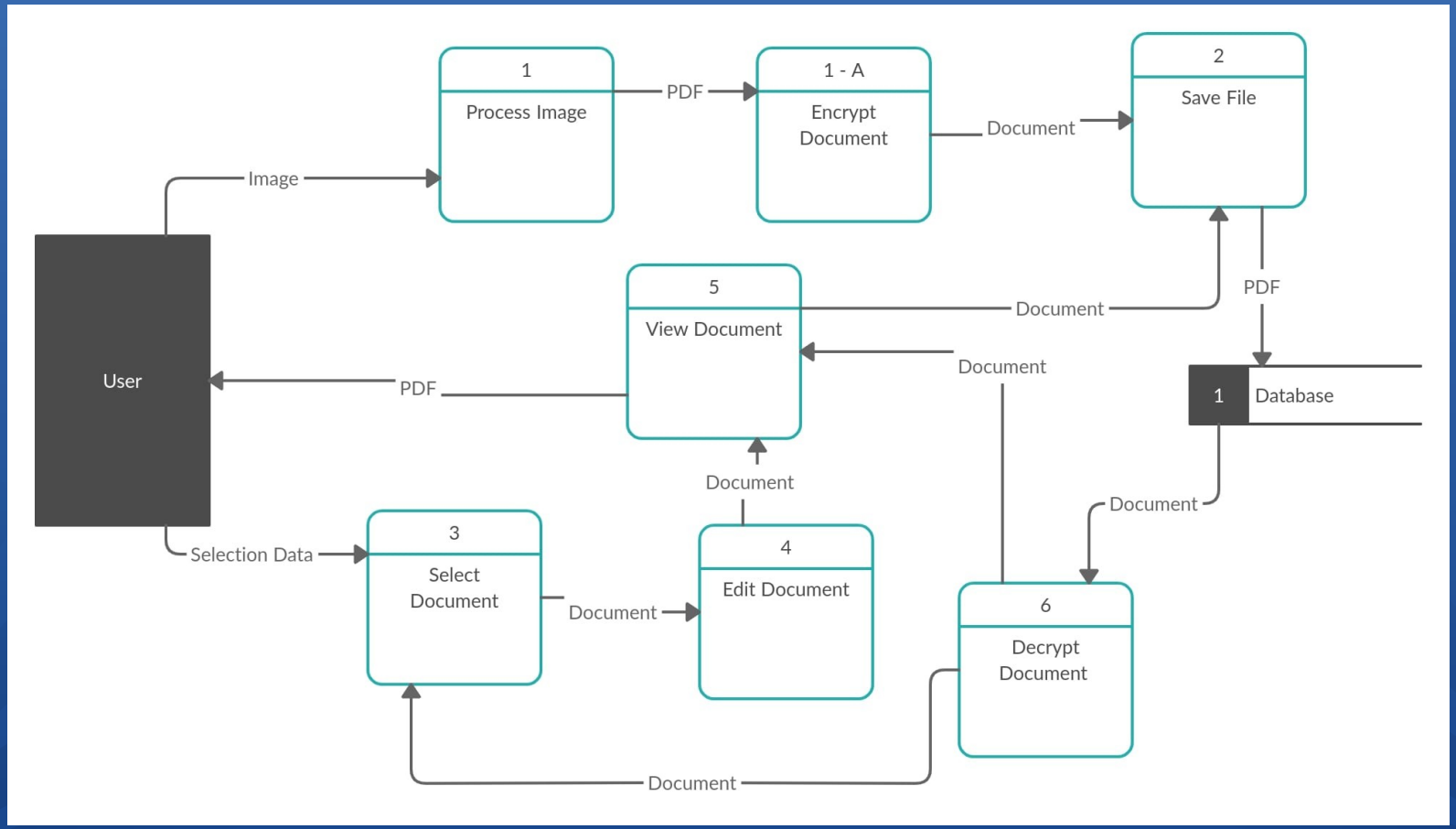
Context Diagram



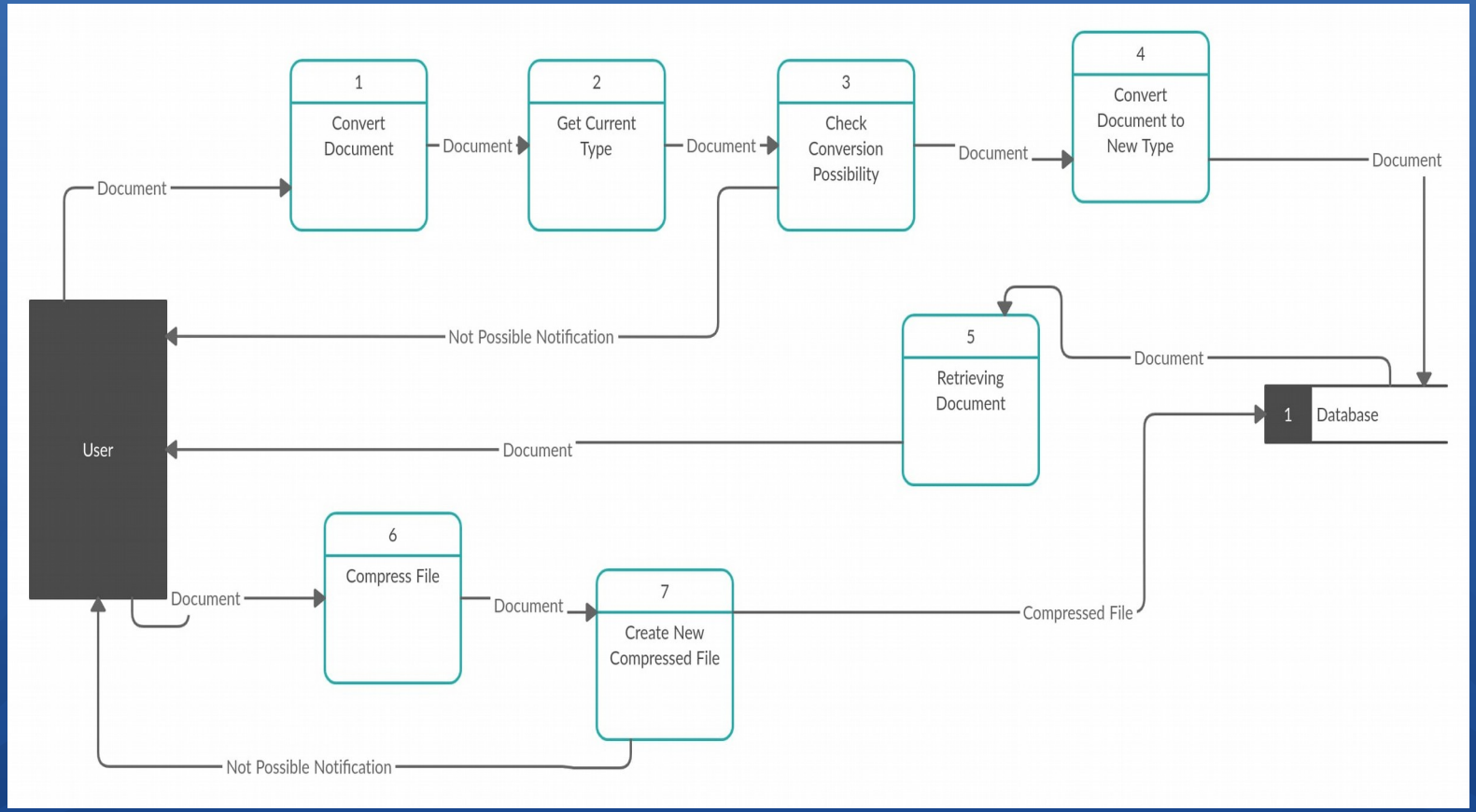
Level 1 Diagram



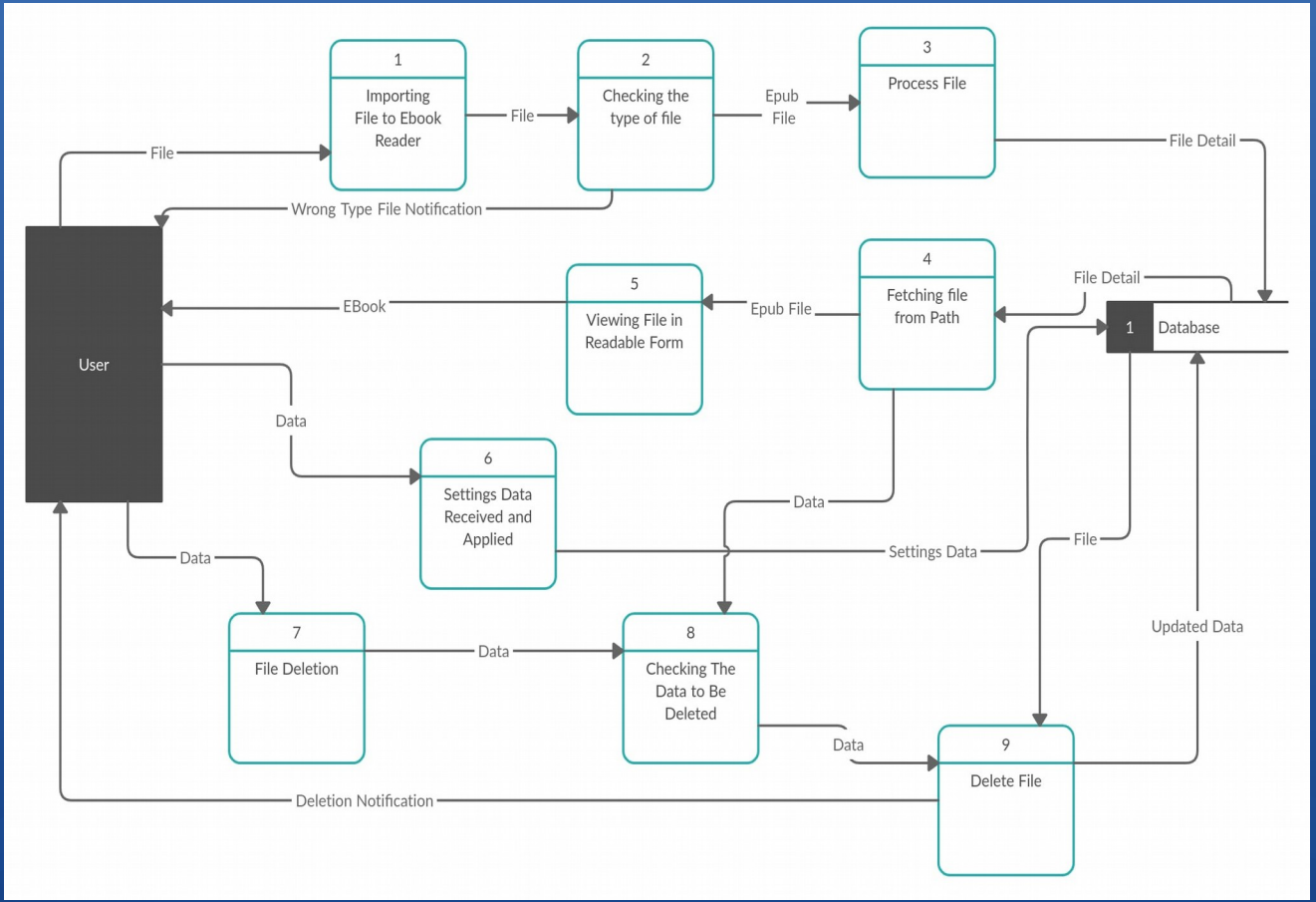
DocScanner


1
Process Image
PDF
1 - A
Encrypt Document
Document
2
Save File
Image
User
5
View Document
Document
PDF
PDF
Document
1
Database
Document
Document
Selection Data
3
Select Document
4
Edit Document
Document
6
Decrypt Document
Document

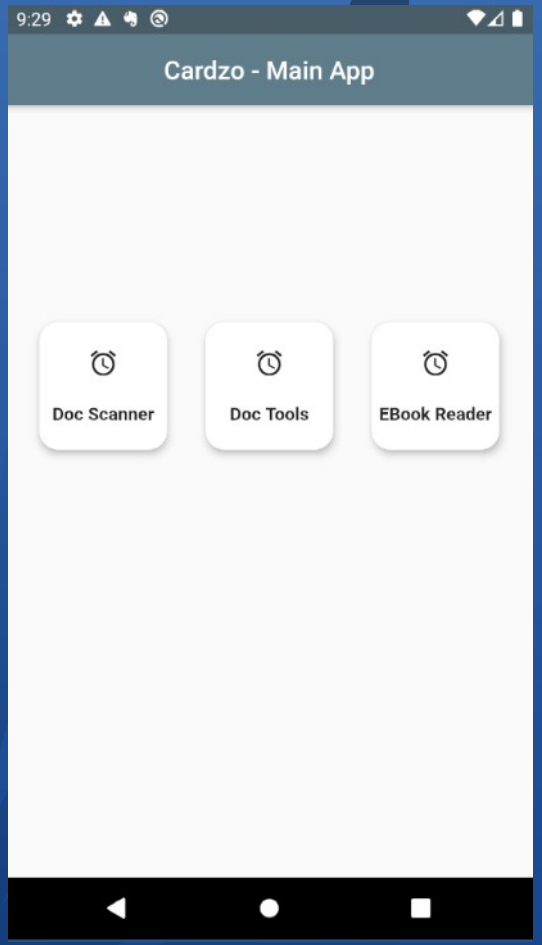
DocTools


1
Convert Document
2
Get Current Type
3
Check Conversion Possibility
4
Convert Document to New Type
Document
Document
Document
Document
Document
Not Possible Notification
User
5
Retrieving Document
Document
1
Database
Document
6
Compress File
Document
7
Create New Compressed File
Compressed File
Not Possible Notification

EReader


1
Importing File to Ebook Reader
File
2
Checking the type of file
Epub File
3
Process File
File Detail
File
Wrong Type File Notification
User
4
Fetching file from Path
File Detail
5
Viewing File in Readable Form
EBook
Epub File
1
Database
Data
6
Settings Data Received and Applied
Data
Settings Data
File
Data
7
File Deletion
Data
8
Checking The Data to Be Deleted
Updated Data
Data
9
Delete File
Deletion Notification

GUI Models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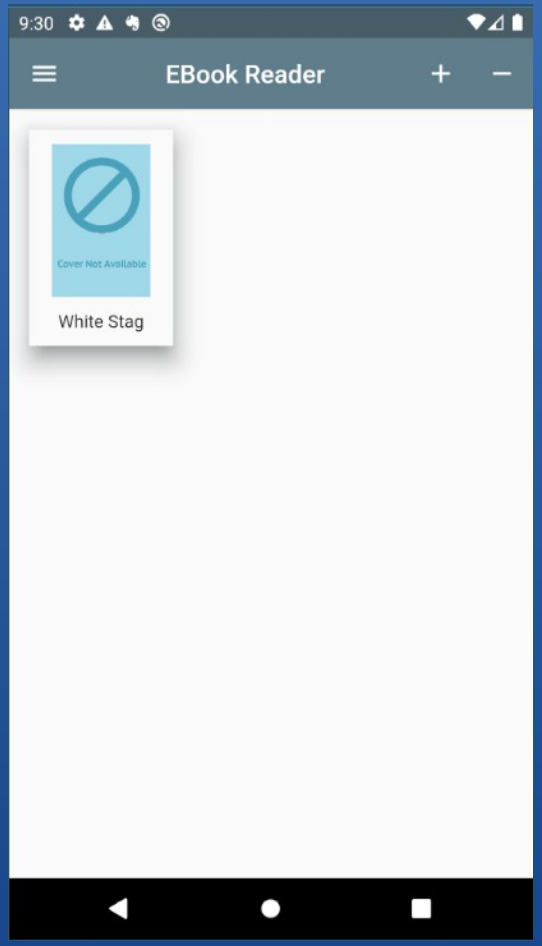
Cardzo - Main App
Doc Scanner
Doc Tools
EBook Reader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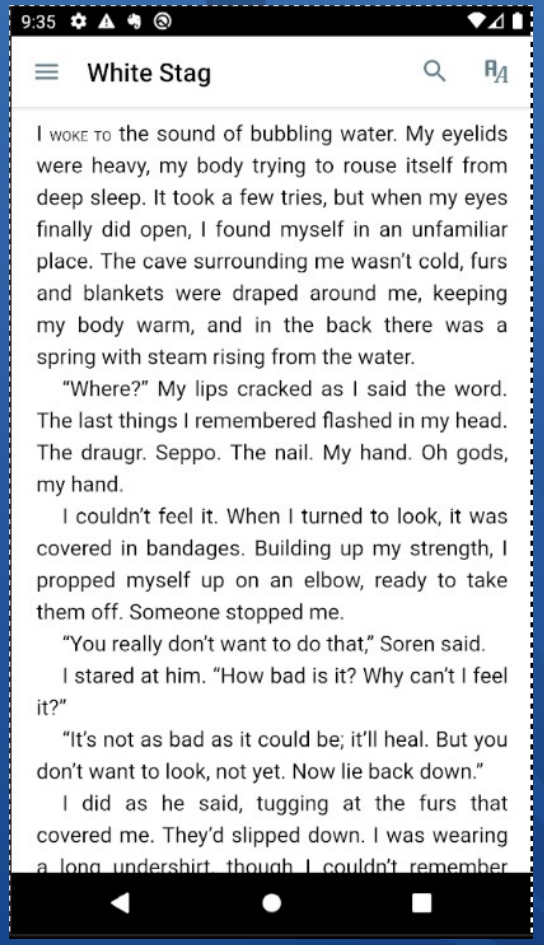
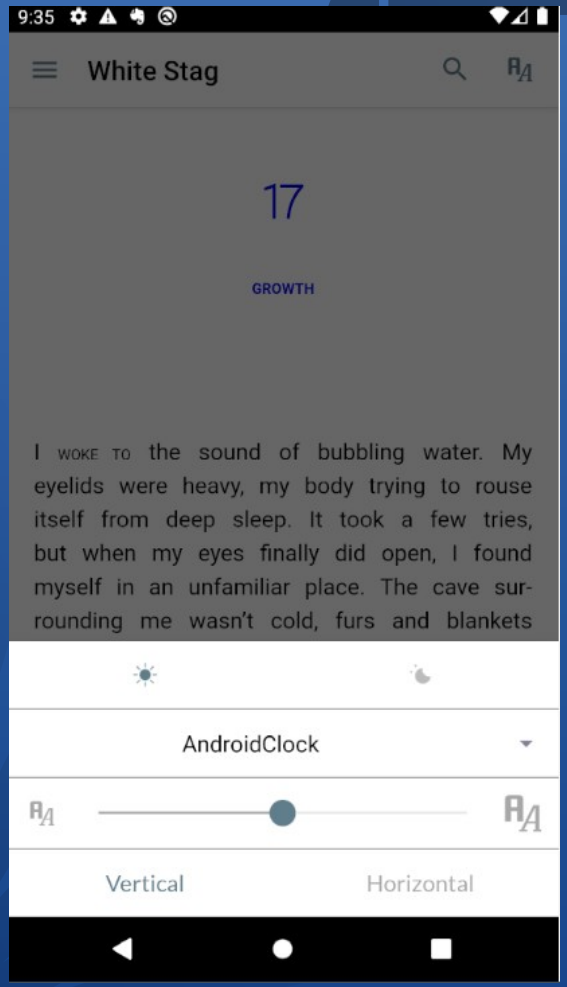
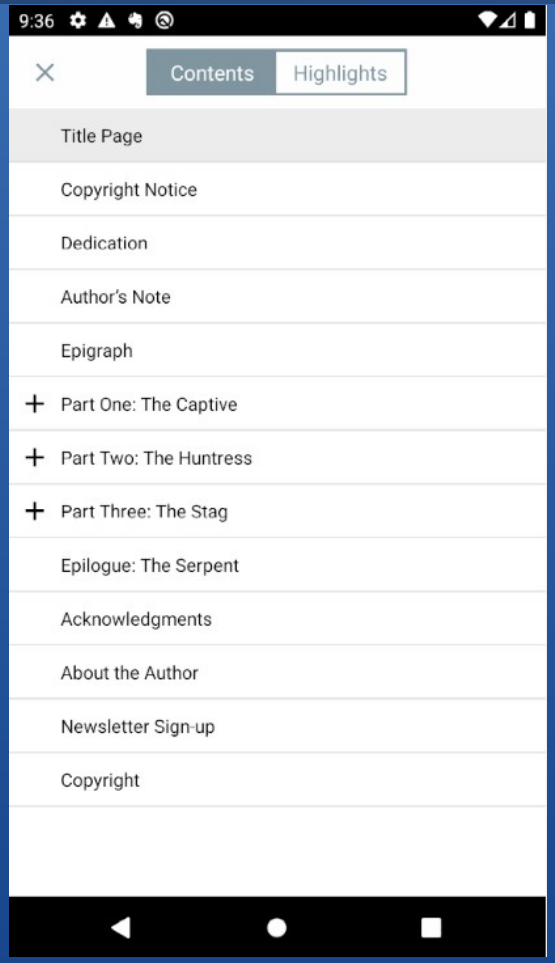
EBook Reader
Cover Not Available
White Stag


9:35
White Stag
I WOKE TO the sound of bubbling water. My eyelids were heavy, my body trying to rouse itself from deep sleep. It took a few tries, but when my eyes finally did open, I found myself in an unfamiliar place. The cave surrounding me wasn't cold, furs and blankets were draped around me, keeping my body warm, and in the back there was a spring with steam rising from the water.
"Where?" My lips cracked as I said the word. The last things I remembered flashed in my head. The draugr. Seppo. The nail. My hand. Oh gods, my hand.
I couldn't feel it. When I turned to look, it was covered in bandages. Building up my strength, I propped myself up on an elbow, ready to take them off. Someone stopped me.
"You really don't want to do that," Soren said.
I stared at him. "How bad is it? Why can't I feel it?"
"It's not as bad as it could be; it'll heal. But you don't want to look, not yet. Now lie back down."
I did as he said, tugging at the furs that covered me. They'd slipped down. I was wearing a long undershirt, though I couldn't remember

Continue..


9:35
White Stag
17
GROWTH
I WOKE TO the sound of bubbling water. My eyelids were heavy, my body trying to rouse itself from deep sleep. It took a few tries, but when my eyes finally did open, I found myself in an unfamiliar place. The cave surrounding me wasn't cold, furs and blankets
AndroidClock
Vertical
Horizontal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Epigraph
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Part Two: The Huntress
Part Three: The Stag
Epilogue: The Serpent
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About the Author
Newsletter Sign-up
Copyright

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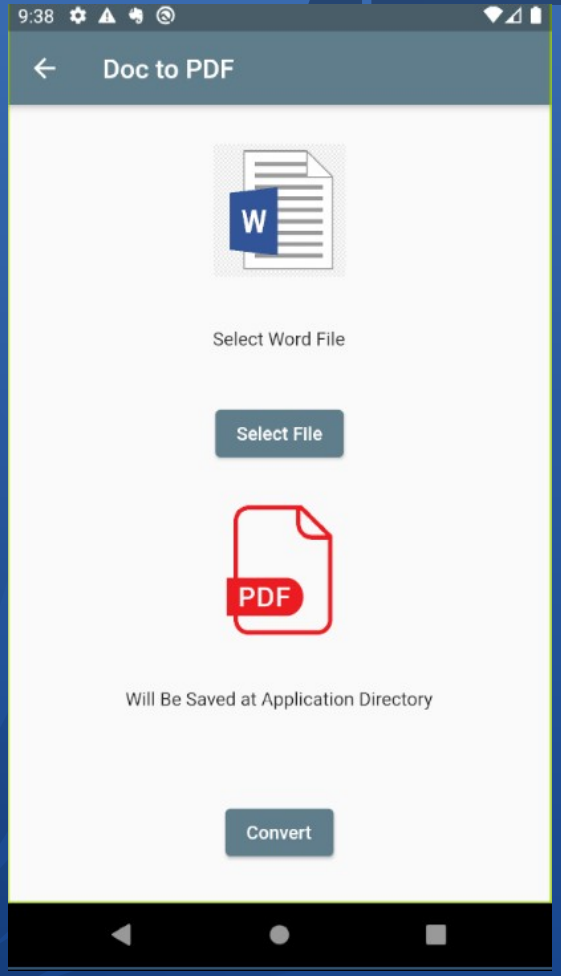
Doc Tools
DOC to PDF
PDF to DOC
JPG to PNG
PNG to JPG
AZW to EPUB
EPUB to AZW

Continue..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Doc to PDF
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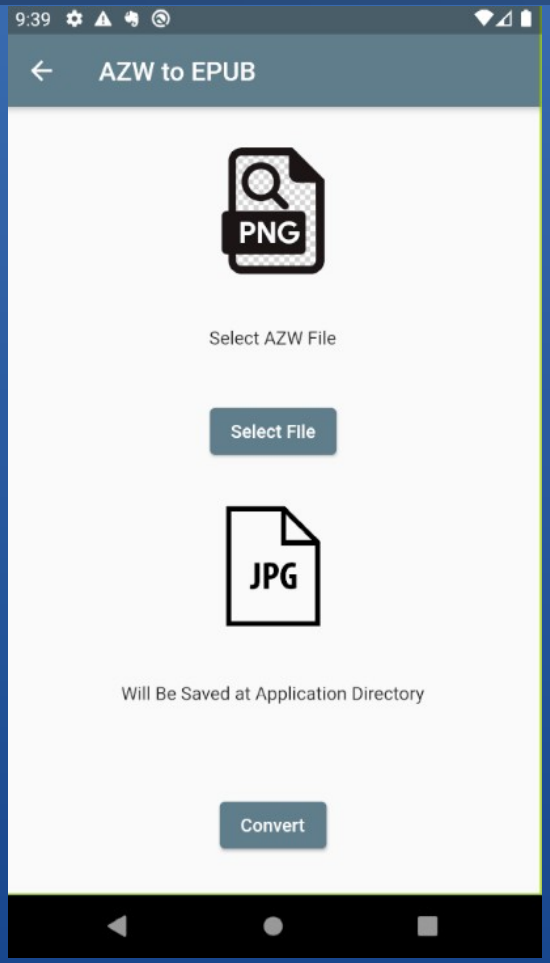
Select Word File
Select File
PDF
Will Be Saved at Application Directory
Convert


9:39
AZW to EPUB
PNG
Select AZW File
Select File
JPG
Will Be Saved at Application Directory
Convert

Future Enhancements

- Changing DocTools Modules API to our own API
- Completing Missing Features in each module
- Adding Translator Module
- Add object detection feature using Deep Learning

THANK YOU