Owl-M Material Design Based Study app

Project Documentation

Owl application - Study Materials Based Learning app

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Introduction

Online classrooms have become the new normal for students and teachers during the ongoing COVID-19 pandemic. Students now communicate with teachers over video-conferencing apps to study and keep up-to-date with their course remotely. To aid students during this time, there are several online learning and education apps, which are available for both Android and IOS devices in India. While some of these learning apps focus on general topics or are used as study aids, others are designed with specialized fields of study in mind. Additionally, education apps India help you understand concepts in interactive ways such as animated videos, which make learning more fun and intuitive than the traditional method. Some apps also come with a live class feature to help clear doubts in real-time. If you're looking for the best online learning apps in India, here's a list that should help you. The old-school methods of conducting a classroom simply don't work for today's plugged-in students, who gain little from churning out stacks of worksheets and study guides. Modern learning theory supports the shift away from antiquated, rote learning models toward personalized learning opportunities in which instructional designs and academic-support strategies are tailored to each individual student's needs rather than uniform lesson planning. This model also creates fun and engaging classroom atmospheres that benefit students and teachers alike. Personalized learning is not a new concept, but the emergence of classroom technology has made it easier for educators to develop and deliver such student-centred lessons. This article explores the benefits of personalized learning and how technology provides alternatives to traditional "one-size-fits-all" approaches to teaching.

Overview

A common problem in classrooms is a disconnection between teachers and students. Instructors are often not using the same language as their students, and the passive way in which information is delivered can create even more disconnect for students who are either very far ahead or very far behind their peers. This is one of the areas in which the personalized learning model greatly benefits teachers and students alike.

Because this model takes into account each student's learning needs, interests, abilities, and aspirations, personalized learning creates more engaging and dynamic classrooms that drive academic achievement and personal growth. In fact, case studies have found that implementing technology in the classroom to create personalized learning plans increases student achievement and improves test scores by an average of 30%.

Mobile learning is expected to cross $78.5 billion worldwide by 2025, states the report by GlobeNewswire. With the increase in the number of smartphone users, the number of people opting for mobile learning is also increasing. However, this trend is going to stay as mobile learning enables the users to learn new things at their convenience – from anywhere. Accessibility and adaptability are also crucial components that uplift the mobile learning trend.

Purpose

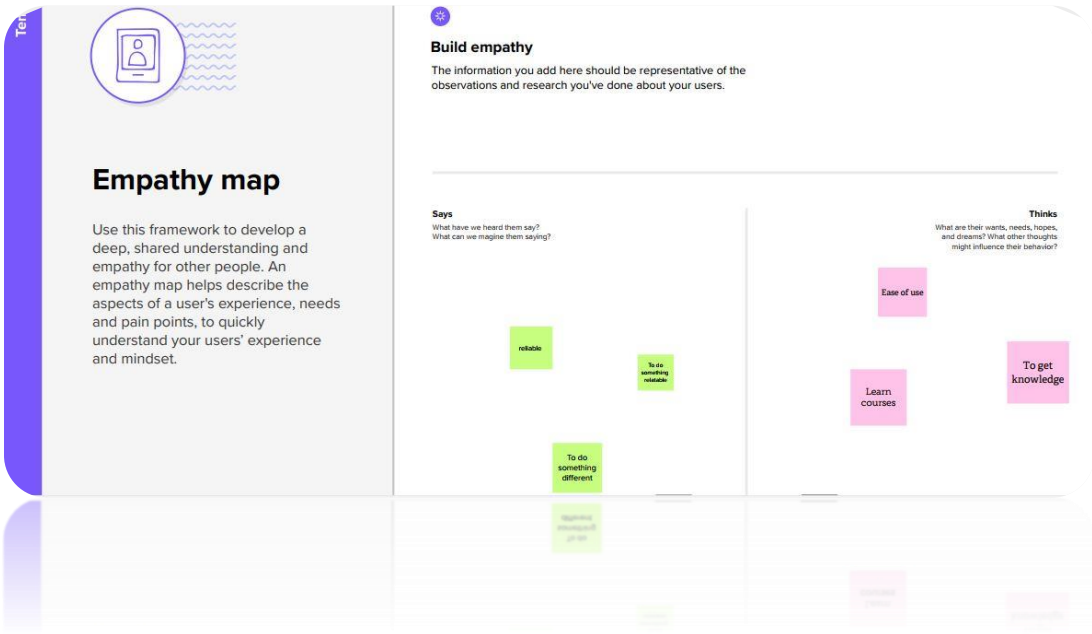
They allow for practical work with different types o technologies- students have access to resources, not only about the topic being studied, but also additional knowledge, as well as the possibility to use different types of technologies, allowing them to obtain the appropriate level of education.

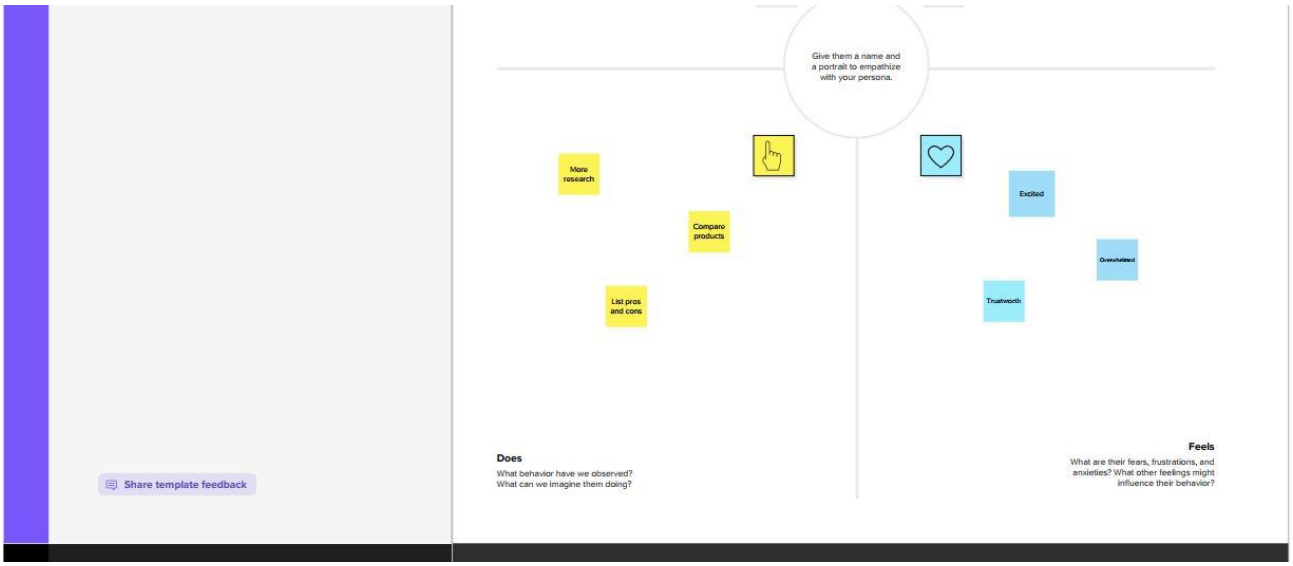
Education apps helps students to analyze what they have been taught and what is the source o it which makes them curious to know more but in a systematic way where they know how, when and what to explore. This overall process helps the students to learn practically and not theoretically.

Problem Definition & Design Thinking

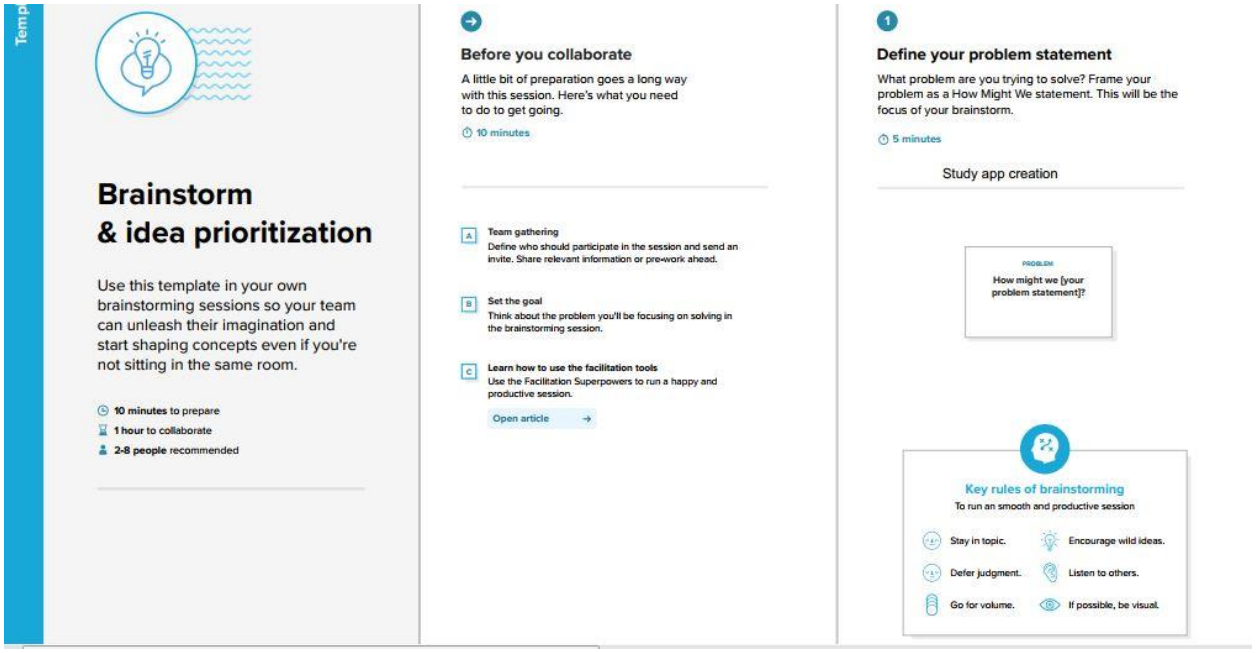
Design thinking is a unique method problem-solving that focuses on user needs first. Those who use design thinking do not need to be designers. It emphasizes observing people and their environments with empathy and using those observations to develop innovative ideas with an iterative , build and test approach.

Empathy Map





Brainstorming and Ideation



2

Brainstorm

Write down any ideas that come to mind that address your problem statement.

10 minutes

TIP

You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!

Person 1

Bad tutorials	Poor progress tracking	Too much gamification
No systematic repetition	Compatibility problems	App security concerns
Poor planning and strategy	Poor user experience	Distractive

Person 2

Difficulty to create	Network connectivity	Interface problems
Communication breakdown	reliability	Interoperability of contents
Exessive screen time	Technical issues	Sense of isolation

Person 3

Requires additional training	Easier to procrastinate	Cyber security
lack of accountability	Slow performance	App forces closing
Can't access resources	Too much adds	Can't pass levels

Person 4

Poor maintanance	Can't download materials	Poor quality of content
No physical interactions	Restricted feedback	No response to queries
Software issues	Unwanted cookies	Buffering problem

3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

20 minutes

Bad tutorials

Poor user experience

App security concerns

TIP

Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

Technical issues

Poor quality of content

Interface problems

App forces closing

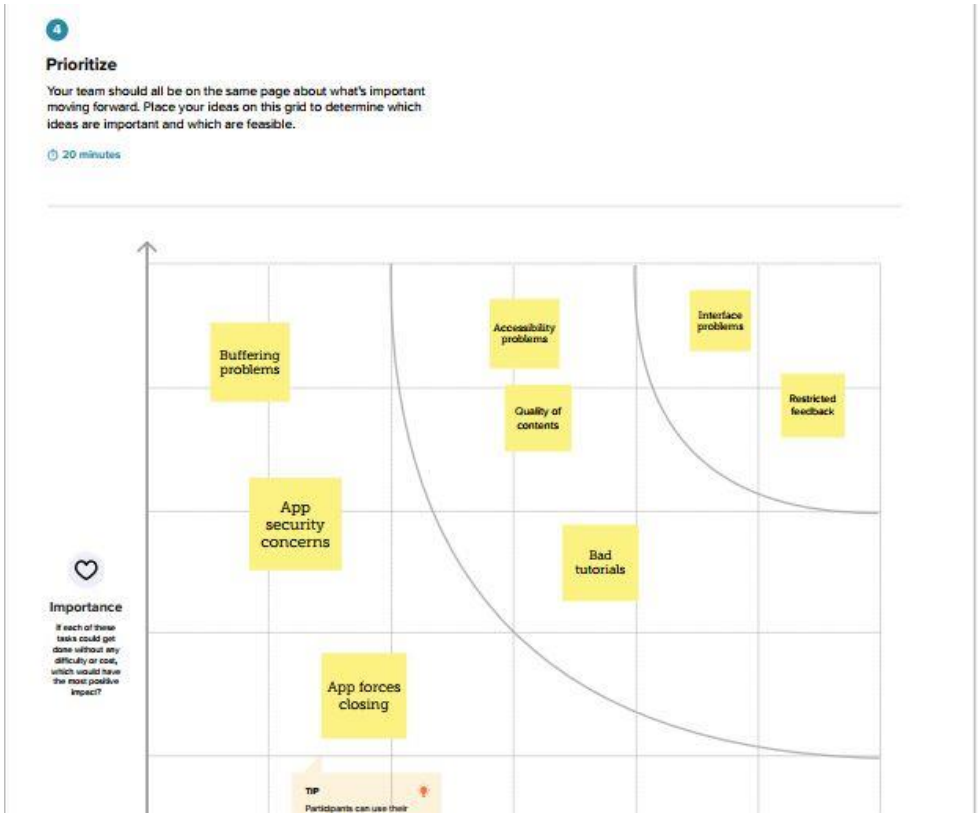
Accessibility problems

Too much of adds

Restricted feedback

Buffering problems

Software issues



Result

The output of our owl application-study app is given below:

Login

Username
sruthi

Password
••••••••••

Successfully log in

Login

Register Forget password?

Login page

Register

Username
sruthi

Email
sgowrigayathri@gmail.com

Password
••••••••

User registered successfully

Register page

Study Material

Arts & Craft

The Basics of Woodturning

Painting

An introduction to oil painting

Main page

Painting

An introduction to oil painting

Architecture

City Phenomenon between Urban Structure and Composition

Design

Learning The Basics of Brand Identity

Arts & Craft

The Basics of Woodturning

What Is WoodTurning

Woodturning is a form of woodworking involving a lathe. With other kinds of woodworking, the wood is stationary and the tool moves to create cuts.

In woodturning, the lathe turns the wood on its axis at high revolutions per minute while relatively stationary special cutting tools on a tool rest do the work.
A wood lathe allows woodturners to create all kinds of objects, from bowls to stair railings to chess pieces to musical instruments.

History of Woodturning

The art on monuments in ancient Egypt offers

Painting

An introduction to oil painting

What is oil paint?

There are three main categories of oil paints: traditional oils, alkyd oils and water-mixable oils. These are all composed of pigment and binder. The binder encapsulates and protects the pigment, while it also acts as an adhesive by attaching neighbouring particles to each other.

What ranges do Winsor & Newton have available?

We currently have 4 ranges of oil paint to suit a variety of different practices.

Winsor & Artists Newton' Oil Colour range is a traditional oil paint, it provides the widest choice

Course 2

Architecture

City Phenomenon between Urban Structure and Composition

Abstract

Cities are not just a sum of buildings, but especially a set of social relations that their inhabitants develop. Cities are characterized by a wide variety of social groups and lifestyles. An urban composition represents a form of the city in which it gets a formal order, so that the shape of any urban ensemble is not linked to a random phenomenon, but to an intervention mastered and understood as such. For the city, the urban composition represents what the architectural composition represents for a building. This concept regarding the composition is common both to the architecture and to the city. The main property of the composition is that it transforms a possibly dispersed ensemble into a whole, resolving the contradictions that arise when the requirements and conditions of the project are numerous. Spatial forms and urban compositions are built over time, longer than

Course 3

Advantages & Disadvantages

Today's learners want relevant, mobile, self-paced, and personalized content. This need is fulfilled with the online mode of learning; here, students can learn at their own comfort and requirement. E-Learning is cost effective as compared to traditional forms of learning. The reason for this price reduction is because learning through this mode happens quickly and easily. A lot of training time is reduced with respect to trainers, travel, course materials, and accommodation. This cost effectiveness also helps in enhancing the profitability of an organization. Also, when you are studying at your own place, you are relieved from paying for travel expenses (e.g.accommodation) when training happens in another city/state and/or external learning materials.

Advantages:

- Accessibility
- Flexibility
- Motivation
- Current content
- Affordability

Disadvantages:

- Distraction
- Lack of social interaction
- Reliance on tech
- Poor personalization
- Poor Technology

Applications

- Knowledge Augmentation
- Tailored learning
- Improved engaggement
- Access to online study material
- Ease of communication
- Remote access
- Learning is possible at anytime and anywhere
- Online study resources
- Study with E-Books

Future Scope

The future study apps is bright, and there are many exciting developments on the horizon. From AI and VR to Microlearning and gamification, to social learning and collaboration , the learning apps landscape is set to become more engaging, interactive, and personalized than ever before. Theses trends are likely to continue to grow in popularity, helping to shape the future of education and training.

Conclusion

There have been lot of steps and processes to follow, and many decision making mechanisms are involved as well. But, we have tried our best to cover multiple scenarios and possibilities you might encounter. There are still challenges that could be out o the box, but this guidebook will hopefully help you create the basic framework for the process as well as the application.

Appendix

Source Code:

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:supportsRtl="true"
        android:theme="@style/Theme.OwlApplication"
        tools:targetApi="31">
        <activity
            android:name=".RegisterActivity"
            android:exported="false"
            android:label="@string/title_activity_register"
            android:theme="@style/Theme.OwlApplication" />
        <activity
```

```
    android:name=".MainActivity"
    android:exported="false"
    android:label="MainActivity"
    android:theme="@style/Theme.OwlApplication" />
<activity
    android:name=".MainActivity5"
    android:exported="false"
    android:label="@string/title_activity_main5"
    android:theme="@style/Theme.OwlApplication" />
<activity
    android:name=".MainActivity4"
    android:exported="false"
    android:label="@string/title_activity_main4"
    android:theme="@style/Theme.OwlApplication" />
<activity
    android:name=".MainActivity3"
    android:exported="false"
    android:label="@string/title_activity_main3"
    android:theme="@style/Theme.OwlApplication" />
<activity
    android:name=".MainActivity2"
    android:exported="false"
    android:label="@string/title_activity_main2"
```

```
        android:theme="@style/Theme.OwlApplication" />
    <activity
        android:name=".LoginActivity"
        android:exported="true"
        android:label="@string/app_name"
        android:theme="@style/Theme.OwlApplication">
        <intent-filter>
            <action android:name="android.intent.action.MAIN" />

            <category android:name="android.intent.category.LAUNCHER" />
        </intent-filter>
    </activity>
  </application>
</manifest>
```