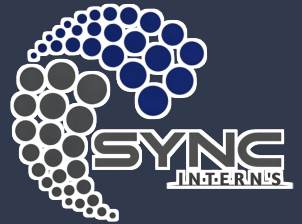# Task Details

Here are the task details of all the domain.
Please choose as per your respective domain

Web Development

Tasks

Week 1	Task 1	Product Landing Page.
Week 2	Task 2	Create a Quiz App using Java Script.
Week 3	Task 3	Create A Music Player using HTML,CSS, JavaScript.
Week 4	Task 4	Create a E-Learning Website

All tasks are mandatory.

Task-1

Product Landing Page

You now know how to make a simple one-page layout.

But how does it differ from the above project? The answer is in a product landing page you will use columns and align the components of the landing page within columns. Basic editing tasks like cropping images and making use of design templates are also covered in this.

IDE – Visual Code Studio.

Skills Required – CSS, Image editing.

Task-2

Quiz App

It's time to master JavaScript with a minor project of making a quiz application.

Optionally you can add the ability to give a score to the user at the end of the game, if the score is above a threshold value you declare the player to be a winner, using some gifs corresponding to winning and losing the game. This can be a very interesting project to work on.

IDE – Visual Code Studio.

Skills Required – HTML, CSS, JavaScript

Task-3
Music Webapp

This music player will have all the features found in a typical music player. You will be able to add, play, pause and seek songs that have been added

IDE – Visual Code Studio.

Skills Required – HTML, CSS, JavaScript

Task-4
E-Learning Website

E-learning is a learning system that contains the following features :

Feature 1: Signing up online

Feature 2: Facility of uploading documents online

Feature 3: Responsive Design

Feature 4: Online Assessments

Feature 5: Future of e-learning

Feature 6: Communication through LMS

Feature 7: Admin Dashboards

App Development

Tasks

Week 1	Task 1	Tic Tac Toe Game App.
Week 2	Task 2	Photo Management Application
Week 3	Task 3	Music App
Week 4	Task 4	Online Exam Application

All tasks are mandatory.

Task–1

Tic Tac Toe

Tic tac toe is a two-player game wherein the players will have to choose either X or O in a 3×3 grid.

The first player can choose any position in the grid and both will get one move at a time, one after the other. The player who succeeds in placing three of their marks in a horizontal, vertical, or diagonal row wins the game.

In the backend, the game will maintain a 2-D array to save the current state of the 3×3 grid. A function will be made to check if the box that's clicked by the player in the displaying grid is empty or not and will decide to put up an image of O if the previous one was X and vice versa. And when the consecutive images match, the game ends.

Tools/ languages required – Android Studio, Java, XML.

Task-2

Photo Management Application

In this application, users would be able to see all the images present in their device in a grid layout structure.

They would also be able to capture new images that would get stored on their device. This is a very basic project but it would definitely help you in learning important concepts.

By building this project you'll learn how any android application communicates with the internal storage of any device. You'll also use the CameraX library for enabling image capture options. You'll also learn about how to do image processing using Picasso or any other image library.

Tools/ languages required – Android Studio, Java or Kotlin, CameraX library, and Picasso.

Task-3

Music App

In this application, the user would be able to search for a song present in their phone storage.

They would be able to play, pause, and stop a song. Your application will fetch all the songs from phone storage and will display it in the form of a list. It will take input from the user and search accordingly.

By building this project, you'll learn how to work with background services because the music application would be running in the background along with other apps.

So, your music app should be run as a background thread. You'll also learn how to provide notifications with play, pause, previous song, and next song buttons.

Tools/ language required – Android Studio, Java or Kotlin, XML, SQL for the local database.

Task-4

Online Exam Application

Conducting exams offline is really overwhelming, especially in times like Covid. So having an online exam application is the best option to opt for where the exam can be conducted without much hustle-bustle.

Tools/ languages required – Android Studio, Java, XML with configuration system, Android Emulator, firebase authentication, and real-time database.

React Js

Tasks

Week 1	Task 1	Create Weather App.
Week 2	Task 2	Create a Messenger App
Week 3	Task 3	Resume Builder Web Application
Week 4	Task 4	Online code editor

All tasks are mandatory.

Task-1

Create Weather App

A weather application that provides detailed weather details for a location specified by the user.

Built using React and Open Weather API for showing latest weather data. Here we have search options with city and country for which we would like to see weather forecast.

We will use the fetch method to fetch the API calls along with the React hooks and conditional rendering.

Task-2

Messenger App

An offshoot of this type of realtime app would be a messenger-style app like that of WhatsApp.

This app would be a little bit more limited in that conversations are usually done with one person, although they don't have to be. Instead of talking in channels you will have different options to talk with one or another person at a time. A good touch would be to add notifications when someone messages you.

This is another app example that would require real time data functionality from your database. Firebase is always a good option for that.

If Firebase gets boring, you could try Supabase which is a very competitive alternative also with realtime database features, but which is backed by Postgres instead of Firestore.

Task-3

Resume Builder Web Application

You can use this project to guide yourself through the steps of creating a resume-builder using ReactJS and NodeJS.

Executing the project will allow you to support highly skilled individuals with the same and enjoy the delight of independently auto-generating it.

Task-4

Online code editor

You can create code in your preferred programming language and execute it on the same platform using an online code execution platform.

Create an online code editor in React and begin editing your source code with it. Make sure to cross this off your list of react projects for beginners, all your eager frontend developers reading this. And in this project, you are going to practice your HTML, CSS, and Intermediate level of React.

UX/UI Design

Tasks

Week 1	Task 1	Mobile App Signup Flow
Week 2	Task 2	Email template
Week 3	Task 3	Product Landing Page
Week 4	Task 4	E-Learning Platform

All tasks are mandatory.

JAVA Intern

Tasks

Week 1	Task 1	Snake Game in Java
Week 2	Task 2	Online Survey System
Week 3	Task 3	Online Resume Builder
Week 4	Task 4	Electricity Billing System

All tasks are mandatory.

Task-1

Snake Game in Java

In our childhood, nearly all of us have enjoyed playing classic snake games. Now we will try to enhance with the help of Java concepts. The concept appears to be easy but it is not that effortless to implement.

One ought to comprehend the OOPs concept in detail to execute this effectively. Furthermore, ideas of Java Swing are used to create this application. The application should comprise the following functionalities:

1.The Snake will have the ability to move in all four directions.

2.The snake's length grows as it eats food. When the snake crosses itself or strikes the perimeter of the box,

3.the game is marked over.

4.Food is always given at different positions

Task-2

Online Survey System

The idea of this project is to create a core java project that can accumulate the viewpoint of a targeted audience of a survey through the Internet. Based on that, the app can send the targeted audiences promotional emails and can launch online surveys. Any business can make use of this type of software to assemble feedback regarding the services or products they offer. We can build such functionality so that only registered customers can cast their responses. The main attributes of the app should be:

1. The apps are programmed in a way that they should be compatible with various databases like SQL and NoSQL.

2. Customers can submit their reactions anonymously.

3. Should be installed at a doable cost.

Task-3

Online Resume Builder

People find it challenging to build their resumes. The concept of this java project is to make this process smooth for the customer. The project streamlines the job of designing a resume for an individual.

We can choose a few industry-accepted, well-crafted resume templates, and request the user to incorporate the details he/she wants to add to the resume. After imputing all the necessary information, a personalized resume can be rendered in pdf and doc format by selecting a single button. The app should own the following features:

1.Engaging resume template.

2.Update each information as per the user's needs.

3.It should have the functionality to publish the resume instantly.

Task-4

Electricity Billing System

This java project is a contemporary take on the classic electricity billing system where a person gathers data from our electricity meter.

The primary objective of this project is to automate the entire process to make it seamless, convenient, and effective. The software can compute the bill amount on the basis of units of electricity consumed in a month.

Electricity Billing System is considered one of the best java project ideas for beginners. The app should have the below-mentioned features:

1. Accurately calculate the bill amount.

2. Instantaneous sharing of data between local electricity offices and users.

3. Extremely safe to negate the chances of tampering.

Python Intern

Tasks

Week 1	Task 1	Build an Alarm Clock.
Week 2	Task 2	OTP Verification using Python
Week 3	Task 3	URL Shortener with Python
Week 4	Task 4	Build your own Chatbot

All tasks are mandatory.

Build an Alarm Clock.

The objective of our project is to implement an alarm clock using Python.

Python consists of some very innovative libraries such as datetime and tkinter which help us to build the project using the current date and time as well as to provide a user interface to set the alarm according to the requirement in 24-hour format.

Task-2

OTP Verification using Python

OTP Verification is the process of verifying a user by sending a unique password so that the user can be verified before completing a registration or payment process. Most of the time, we get an OTP when we make an online payment, or when we forget our password, or when creating an account on any online platform. Thus, the sole purpose of an OTP is to verify the identity of a user by sending a unique password.

We can easily create an application for the task of OTP verification using Python by following the steps mentioned below:

1. First, create a 6-digit random number.

2. Then store the number in a variable

3. Then we need to write a program to send emails.

4. When sending email, we need to use OTP as a message.

5. Finally, we need to request two user inputs; first for the user's email and then for the OTP that the user has received.

So this is the complete process of creating an OTP verification application using Python.

URL Shortener with Python

You must have used various online URL shortening services and they all are doing a great job as well! Even Google forms also use shorten URLs for ease of use. So it's a widely used service on the Internet.

Have you ever thought about or tried to shorten the length of the URL? Hopefully, there are plenty of libraries and APIs available in the Python programming language to help us do the same using programming

Task-4

Build your own Chatbot

A chatbot is a piece of software that mimics human dialogue through text chats, voice commands, or both. Here are the 9 steps you will cover to help you get a chatbot :

1. Decide what type of chatbot is best for you.

2. Determine your chatbot key performance indicator.

3. Understand user needs.

4. Give your chatbot a personality.

5. Plan your chatbot flow.

6. Design your chatbot.

7. Preview and test your chatbot.

8. Target your chatbot.

9. Measure and optimise chatbot performance.

Software Development

Tasks

Week 1	Task 1	Bug Tracker
Week 2	Task 2	Online Election System
Week 3	Task 3	Attendance Monitoring System
Week 4	Task 4	Local Train Ticketing System

All tasks are mandatory.

Bug Tracker

A bug tracking system is an application that lets you keep track of bugs (and often suggestions) for your software project in a database. Here is a three-step process that businesses can use to start creating their own bug tracking process.

Step 1: Use a tracking system to log errors, and assign them to teammates.

Step 2: Prioritize and test.

Step 3: Deploy the fixes.

Machine Learning

Tasks

Week 1	Task 1	Create a chat Bot
Week 2	Task 2	Real-time Face Mask Detection
Week 3	Task 3	Boston house price predictions
Week 4	Task 4	Sign Language Classification

All tasks are mandatory.

Artificial Intelligence

Tasks

Week 1 & Week 2	Task 1	Plant Disease Detection Dataset
Week 3 & week 4	Task 2	Handwritten Digit recognition Dataset

All tasks are mandatory.