A Project On

PROJECT - K

MASTERS
IN
COMPUTER SCIENCE AND ENGINEERING

Submitted By

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INTRODUCTION

Project K aims to bring together technology, community, and innovation to advance solar energy tracking. Focus areas are Crowdsource Learning, Collaborative coding and Citizen scientist services. Solar graph is a tool to monitor and visualize solar energy related data.

Crowdsource Learning – Harnessing the power of community to share knowledge and learning resources. Learners and Professionals from diverse backgrounds contribute to the knowledge base.

Collaborative Coding Platform – Opensource coding efforts where developers work together on a shared platform.

Empowering Citizen Scientists with Solar Graph – Volunteers who contribute to solar energy data and use the solar graph tool to track energy generation trends.

PROJECT OBJECTIVES

1. **Make Learning Free and Collaborative**: Create an easy-to-use platform where people can share knowledge.
2. **Enhanced Doubt Solver**: There is no better helper than programmer when coming to development.
3. **Promote Citizen Scientists**: People who can help and contribute solar graph data and allowed to collection of real-time data.
4. **Improve Efficiency**: Ensure learning is better, sharing is good and finally helping is great.
5. **Responsive Design**: Develop a platform that works seamlessly on laptops, tablets, and smartphones.

SYSTEM REQUIREMENTS

Functional Requirements

- **Crowdsourced Learning**: Allow students or people who wants to learn new things learn.
- **Better resources**: Access the best possible courses in a domain they want to master.

Non-functional Requirements

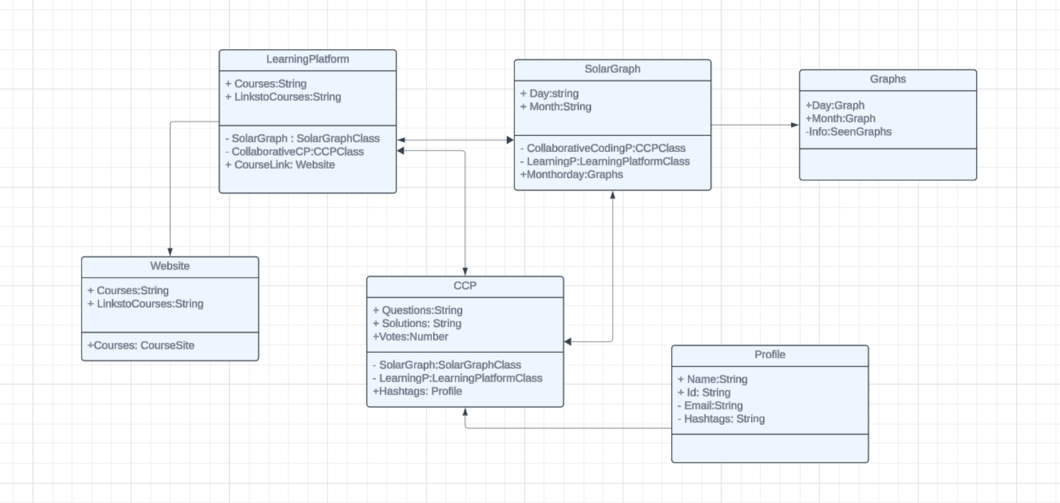
- **Usability**: The interface should be easy to navigate, with clear instructions for accessing the data.
- **Performance**: The system should load pages quickly and respond within 2-3 seconds for all main functionalities.
- **Security**: Ensure user data is securely stored, with authentication and authorization for sensitive operations.
- **Scalability**: The system should handle multiple users simultaneously without performance issues.
- **Availability**: The platform should be accessible 24/7 for to learn answer from anywhere.

Software Requirements

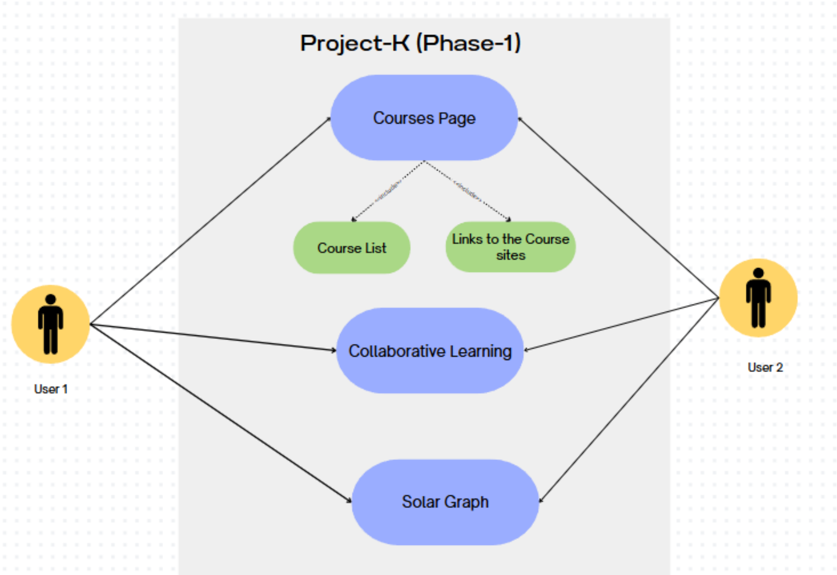
- **Frontend Technologies**: HTML, CSS, JavaScript for building the user interface.
- **Browser Compatibility**: The application should be compatible with all major browsers (Chrome, Firefox, Safari, Edge).
- **Version Control**: Git for code management and collaboration.

UML DIAGRAMS

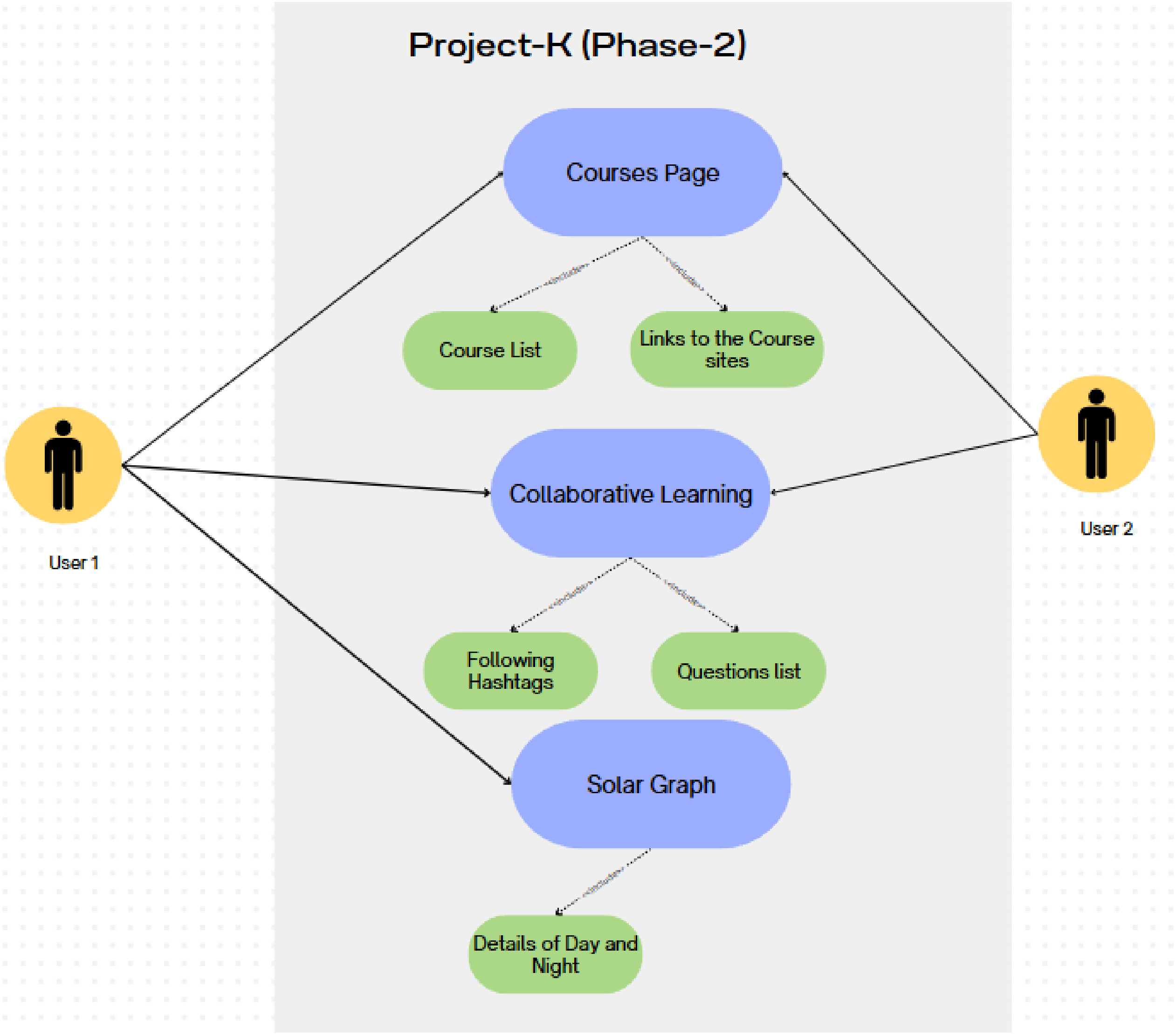
CLASS DIAGRAM:



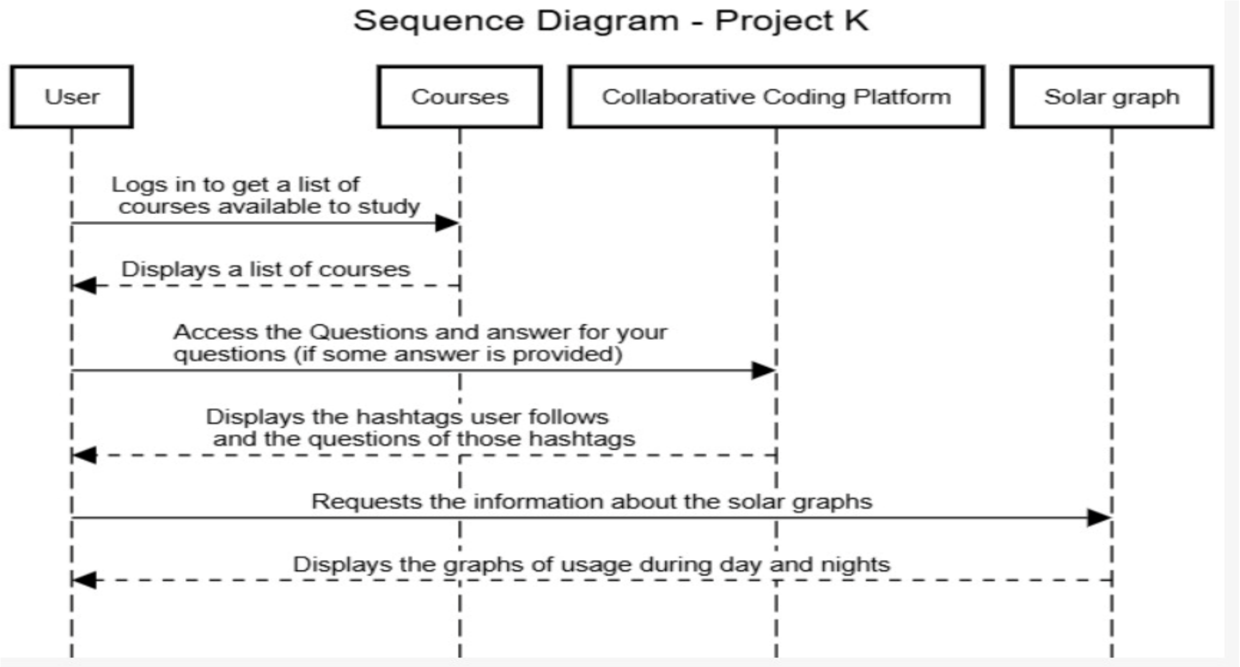
USE CASE DIAGRAM 1:



USE CASE DIAGRAM 2:



SEQUENCE DIAGRAM:


Sequence Diagram - Project K
User
Courses
Collaborative Coding Platform
Solar graph
Logs in to get a list of courses available to study
Displays a list of courses
Access the Questions and answer for your questions (if some answer is provided)
Displays the hashtags user follows and the questions of those hashtags
Requests the information about the solar graphs
Displays the graphs of usage during day and nights

INSTALLATION PROCESS

How to Install Visual Studio Code

Step 1: Visit the Official Website of the Visual Studio Code using any web browser like Google Chrome, Microsoft Edge, etc.,

Step 2: Press the "**Download for Windows, Mac etc**" button on the website to start the download of the Visual Studio Code Application.

Step 3: When the download finishes, then the **Visual Studio Code Icon** appears in the downloads folder.

Step 4: Click on the **Installer** icon to start the installation process of the Visual Studio Code.

Step 5: After the Installer opens, it will ask you to accept the terms and conditions of the Visual Studio Code. Click on **I accept the agreement** and then click the **Next** button.

Step 6: Choose the location data for running the Visual Studio Code. It will then ask you to browse the location. Then click on the **Next** button.

Step 7: Then it will ask to begin the installation setup. Click on the **Install** button.

Step 8: After clicking on Install, it will take about 1 minute to install the Visual Studio Code on your device.

Step 9: After the Installation setup for Visual Studio Code is finished, it will show a window like this below. Tick the "**Launch Visual Studio Code**" checkbox and then click **Next**.

tep 10: After the previous step, the **Visual Studio Code window** opens successfully. Now you can create a new file in the Visual Studio Code window and choose a language of yours to begin your programming journey!

IMPLEMENTATION CODE

1. **Courses.html:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Project-K</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      background-color: #fafafa;
      margin: 0;
      display: flex;
    }

    .container {
      text-align: center;
    }

    .side-menu {
      width: 250px;
      background-color: white;
      box-shadow: 2px 0 5px grey;
      display: flex;
      flex-direction: column;
      padding: 20px;
      border-radius: 8px;
      position: fixed;
      height: 100vh;
    }

    .menu-item {
      text-decoration: none;
      display: flex;
      align-items: center;
      margin: 20px 0;
      cursor: pointer;
```

```
}

.menu-item .text {
   font-size: 18px;
   font-weight: bold;
}

.menu-item:hover {
   background-color: #f0f0f0;
   border-radius: 10px;
   padding: 10px;
}

.menu-item .button {
   font-size: 18px;
   font-weight: bold;
}

.main-content {
   display: flex;
   justify-content: center;
   flex-grow: 1;
   margin-left: 200px;
   padding: 20px;
}

.content {
   width: 100%;
   max-width: 900px;
   overflow-y: auto;
   scrollbar-width: thin;
   scrollbar-color: #888 #e0e0e0;
}

.content::-webkit-scrollbar {
   width: 10px;
}

.content::-webkit-scrollbar-track {
    background: #e0e0e0;
    border-radius: 10px;
}

.content::-webkit-scrollbar-thumb {
    background-color: #888;
    border-radius: 10px;
    border: 2px solid #e0e0e0;
}

.post-container {
    display: grid;
    grid-template-columns: repeat(auto-fill, minmax(300px, 1fr));
    gap: 20px;
    padding: 10px;
}

.post {
    background-color: white;
    border-radius: 12px;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
    margin-bottom: 20px;
    padding: 15px;
    transition: transform 0.3s, box-shadow 0.3s;
}

.post:hover {
    transform: translateY(-10px);
    box-shadow: 0 8px 16px rgba(0, 0, 0, 0.2);
}

.post img {
    width: 100%;
    height: auto;
    border-radius: 12px;
}

.post h3 {
    font-size: 18px;
    margin: 15px 0 10px;
    font-family: 'Arial Black', sans-serif;
}

.post p {
    color: #555;
    font-size: 14px;
    line-height: 1.6;
}

.post .image-container {
    width: 100%;
    height: 0;
    padding-bottom: 60%;
    position: relative;
}

.post .image-container img {
    position: absolute;
    top: 0;
    left: 0;
    width: 100%;
    height: 100%;
    object-fit: cover;
    border-radius: 8px;
}

.scrollable-content {
    height: calc(100vh - 40px);
    overflow-y: auto;
    padding: 20px;
    background-color: #ffffff;
    border-radius: 12px;
    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);
}

.profile{
    margin-top: 20px;
    margin-right: 25px;
```

```
            font-size: 18px;
            font-weight: bold;
            cursor: pointer;
            height: 25px;
            display: flex;
            align-items: center;
        }

        .profile:hover {
            background-color: #f0f0f0;
            border-radius: 10px;
            padding: 10px;
        }

    </style>
</head>
<body>
    <div class="side-menu">
        <div class="container">
            <img src="logo.jpg" height="100px">
            <h2>Project-K</h2>
        </div>
        <div class="menu-item">
        <a href="courses.html">
            <span class="text">Courses</span>
        </a>
        </div>
        <div class="menu-item">
        <a href="collaborative coding platform.html">
            <span class="text">Stack Overflow</span>
            </a>
        </div>
        <div class="menu-item">
            <a href="solargraph.html">
            <span class="text">Solar Graph</span>
            </a>
        </div>
        <div class="menu-item">
            <span class="text">Notifications</span>
        </div>
        <div class="menu-item">
            <span class="text">Following</span>
        </div>
    </div>

    <div class="main-content">
        <div class="content scrollable-content">
            <div class="post-container">
                <div class="post">
                    <div class="image-container">
                                                                  <img
src="https://th.bing.com/th/id/OIP.NcoWxTfDKNryzaO2QiYrOQHaHa?rs=1&
pid=ImgDetMain">
                    </div>
                                 <h3>Programming for Everybody (Getting Started with
Python)</h3>
                     <p>This course aims to teach everyone the basics of programming
computers using Python. We cover the basics of how one constructs a program
from a series of simple instructions in Python.
                         The course has no pre-requisites and avoids all but the simplest
mathematics. Anyone with moderate computer experience should be able to
master the materials in this course.
                         This course will cover Chapters 1-5 of the textbook “Python for
Everybody”.  Once a student completes this course, they will be ready to take
more advanced programming courses.
                        This course covers Python 3.
                    </p>
                                                                      <a
href="https://www.coursera.org/learn/python?specialization=python">Access
the course here</a>
                </div>
                <div class="post">
                    <div class="image-container">
                                                                  <img
src="https://th.bing.com/th/id/OIP.Oag0dh4MINdG_qxOzJMoiwHaIB?rs=1&pi
d=ImgDetMain">
                    </div>
                          <h3>The Complete JavaScript Course 2024: From Zero to
Expert!</h3>
```

```
                <p>JavaScript is the most popular programming language in the world. It powers the entire modern web.
                It provides millions of high-paying jobs all over the world.

                That's why you want to learn JavaScript too. And you came to the right place!</p>
              <a href = "https://www.udemy.com/course/the-complete-javascript-course/">Access the course here</a>
            </div>
            <div class="post">
              <div class="image-container">
                <img src="https://e-courses4you.com/wp-content/uploads/2020/04/html-and-css.jpg">
              </div>
                <h3>Build Responsive Real-World Websites with HTML and CSS</h3>
              <p>Well, I'm here to teach you HTML, CSS, and web design, all by building the stunning website that you just saw, step-by-step.
                So, after finishing this course, you will know exactly how to build a beautiful, professional, and ready-to-launch website just like Omnifood,
                by following a 7-step process. And it will even look great on any computer, tablet, and smartphone.
               But what if you want to build a completely different website? Well, no problem! I designed the course curriculum with exactly this goal:
                to enable you to design and build any website that you can think of, not just copy the course project.</p>
               <a href = "https://www.udemy.com/course/design-and-develop-a-killer-website-with-html5-and-css3/">Access the course here</a>
            </div>
            <div class="post">
              <div class="image-container">
                  <img src="https://th.bing.com/th/id/OIP.oc38tVqEut21Lo9-EL6kSQHaEK?rs=1&pid=ImgDetMain">
              </div>
              <h3>Modern JavaScript From The Beginning 2.0 (2024)</h3>
               <p>This is a 36+ hour in-depth course that will take you from the absolute beginning of JavaScript, learning about data types,
                functions and loops to learning DOM manipulation, asynchronous JS with promises, async/await and much more.
                You will even learn how to write unit tests for algorithms.
               We go into how JavaScript works under the hood including execution context, the call stack, event loop, etc.
              We learn about Webpack tooling and how to create a modern development environment.
           At the end, we build a Node.js/Express API with a custom Webpack frontend.</p>
          <a href = "https://www.udemy.com/course/modern-javascript-from-the-beginning/?couponCode=ST15MT100124A">Access the course here</a>
        </div>
        <div class="post">
          <div class="image-container">
                <img src="https://th.bing.com/th/id/OIP.oc38tVqEut21Lo9-EL6kSQHaEK?rs=1&pid=ImgDetMain">
          </div>
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           <p>This is a 36+ hour in-depth course that will take you from the absolute beginning of JavaScript, learning about data types,
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            You will even learn how to write unit tests for algorithms.
               We go into how JavaScript works under the hood including execution context, the call stack, event loop, etc.
              We learn about Webpack tooling and how to create a modern development environment.
           At the end, we build a Node.js/Express API with a custom Webpack frontend.</p>
          <a href = "https://www.udemy.com/course/modern-javascript-from-the-beginning/?couponCode=ST15MT100124A">Access the course here</a>
        </div>
        <div class="post">
          <div class="image-container">
                <img src="https://th.bing.com/th/id/OIP.oc38tVqEut21Lo9-EL6kSQHaEK?rs=1&pid=ImgDetMain">
          </div>
          <h3>Modern JavaScript From The Beginning 2.0 (2024)</h3>
           <p>This is a 36+ hour in-depth course that will take you from the absolute beginning of JavaScript, learning about data types,
            functions and loops to learning DOM manipulation, asynchronous JS with promises, async/await and much more.
            You will even learn how to write unit tests for algorithms.
```

```
                        We go into how JavaScript works under the hood including execution context, the call stack, event loop, etc.
                       We learn about Webpack tooling and how to create a modern development environment.
                    At the end, we build a Node.js/Express API with a custom Webpack frontend.</p>
                <a href = "https://www.udemy.com/course/modern-javascript-from-the-beginning/?couponCode=ST15MT100124A">Access the course here</a>
            </div>
            <div class="post">
                <div class="image-container">
                      <img src="https://th.bing.com/th/id/OIP.oc38tVqEut21Lo9-EL6kSQHaEK?rs=1&pid=ImgDetMain">
                </div>
                <h3>Modern JavaScript From The Beginning 2.0 (2024)</h3>
                 <p>This is a 36+ hour in-depth course that will take you from the absolute beginning of JavaScript, learning about data types,
                  functions and loops to learning DOM manipulation, asynchronous JS with promises, async/await and much more.
                  You will even learn how to write unit tests for algorithms.
                        We go into how JavaScript works under the hood including execution context, the call stack, event loop, etc.
                       We learn about Webpack tooling and how to create a modern development environment.
                    At the end, we build a Node.js/Express API with a custom Webpack frontend.</p>
                <a href = "https://www.udemy.com/course/modern-javascript-from-the-beginning/?couponCode=ST15MT100124A">Access the course here</a>
            </div>
            <div class="post">
                <div class="image-container">
                      <img src="https://th.bing.com/th/id/OIP.oc38tVqEut21Lo9-EL6kSQHaEK?rs=1&pid=ImgDetMain">
                </div>
                <h3>Modern JavaScript From The Beginning 2.0 (2024)</h3>
                 <p>This is a 36+ hour in-depth course that will take you from the absolute beginning of JavaScript, learning about data types,
                  functions and loops to learning DOM manipulation, asynchronous JS with promises, async/await and much more.
                  You will even learn how to write unit tests for algorithms.
                We go into how JavaScript works under the hood including
execution context, the call stack, event loop, etc.
               We learn about Webpack tooling and how to create a modern
development environment.
           At the end, we build a Node.js/Express API with a custom Webpack
frontend.</p>
          <a href = "https://www.udemy.com/course/modern-javascript-from-
the-beginning/?couponCode=ST15MT100124A">Access the course here</a>
        </div>
      </div>
    </div>
  </div>
  <div class = "profile">
    <p>Profile</p>
  </div>
</body>
</html>
```

2. **Collaborative coding platform.html:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>Collaborative Coding Platform</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      background-color: #fafafa;
      margin: 0;
      display: flex;
    }

    .container {
      text-align: center;
    }

    .side-menu {
```

```
   width: 250px;
   background-color: white;
   box-shadow: 2px 0 5px grey;
   display: flex;
   flex-direction: column;
   padding: 20px;
   border-radius: 8px;
   position: fixed;
   height: 100vh;
}

.menu-item {
   text-decoration: none;
   display: flex;
   align-items: center;
   margin: 20px 0;
   cursor: pointer;
}

.menu-item .text {
   font-size: 18px;
   font-weight: bold;
}

.menu-item:hover {
   background-color: #f0f0f0;
   border-radius: 10px;
   padding: 10px;
}

.menu-item .button {
   font-size: 18px;
   font-weight: bold;
}

.content {
   width: 100%;
   max-width: 900px;
   overflow-y: scroll;

}
```

```
.main-content {
   display: flex;
   justify-content: center;
   flex-grow: 1;
   margin-left: 270px;
   padding: 20px;
   width: calc(100% - 270px);
}

.post-container {
   display: grid;
   grid-template-columns: repeat(auto-fill, minmax(300px, 1fr));
   gap: 20px;
}

.post {
   background-color: #fff;
   border-radius: 8px;
   box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
   padding: 20px;
   transition: transform 0.2s;
}

.post:hover {
   transform: translateY(-5px);
}

.post h3 {
   font-size: 18px;
   margin: 10px 0;
   color: #333;
}

.post p {
   color: #666;
   font-size: 14px;
   line-height: 1.6;
}

.tags {
```

```
            display: inline-block;
            background-color: #e0e0e0;
            color: #333;
            padding: 4px 8px;
            border-radius: 12px;
            font-size: 12px;
            margin: 5px 5px 0 0;
        }

        .scrollable-content {
            height: calc(100vh - 40px);
            overflow-y: auto;

        }

        .profile{
            margin-top: 20px;
            margin-right: 25px;
            font-size: 18px;
            font-weight: bold;
            cursor: pointer;
            height: 25px;
            display: flex;
            align-items: center;
        }

        .profile:hover {
            background-color: #f0f0f0;
            border-radius: 10px;
            padding: 10px;
        }

    </style>
</head>
<body>
    <div class="side-menu">
        <div class="container">
            <img src="logo.jpg"  height="100px">
            <h2>Project-K</h2>
        </div>
        <div class="menu-item">
```

```
            <a href="courses.html">
            <span class="text">Courses</span>
            </a>
        </div>
        <div class="menu-item">
            <a href="collaborative coding platform.html">
            <span class="text">Stack Overflow</span>
            </a>
        </div>
        <div class="menu-item">
            <a href="solargraph.html">
            <span class="text">Solar Graph</span>
            </a>
        </div>
        <div class="menu-item">
            <span class="text">Notifications</span>
        </div>
        <div class="menu-item">
            <span class="text">Following</span>
        </div>
    </div>

    <div class="main-content">
        <div class="content scrollable-content">
            <div class="content">
                <main class="question-list">
                    <h2>24,235,696 Questions</h2>

                    <div class="post">
                        <div class="votes">27 votes</div>
                        <div class="summary">
                             <h3><a href="#">Make a Poisson zero-inflation model
panel</a></h3>
                           <p>I am working with a zero-inflated Poisson model. My
data is a panel and I would like the model to reflect it. I've read pscl CRAN
and can't find a command to add a panel.</p>
                            <span class="tags">#r #glm #zero #poisson</span>
                        </div>
                    </div>

                    <div class="post">
                        <div class="votes">23 votes</div>
                        <div class="summary">
                          <h3><a href="#">How to query a dynamic list of strings
using SQL?</a></h3>
                    <p>I have a table Customers with multiple columns one
of which is state...</p>
                            <span class="tags">#sql #dynamic-sql</span>
                        </div>
                    </div>

                    <div class="post">
                        <div class="votes">543 votes</div>
                        <div class="summary">
                                <h3><a href="#">C++ Qt how to properly delete
widget</a></h3>
                            <p>If I created any widget something like
QPushButton...</p>
                            <span class="tags">#c++ #qt #widget</span>
                        </div>
                    </div>
                    <div class="post">
                        <div class="votes">435 votes</div>
                        <div class="summary">
                            <h3><a href="#">Bloomberg Python Query Returning
unknown ValueError</a></h3>
                            <p>I am trying to query specific Bloomberg tickers and
write them into an excel. The code itself is pretty straightforward and I
have gotten it to work for all tickers except "Move Index". When querying
for the this particular ticker, I am getting the exception: raise
ValueError(data) ValueError: []. I blocked out the particular query code
with try-except to get more information about the error, but it's still
returning the same exception with no further detail.</p>
                            <span class="tags">#c++ #qt #widget</span>
                        </div>
                    </div>

                    <div class="post">
                        <div class="votes">345 votes</div>
                        <div class="summary">
                            <h3><a href="#">Bloomberg Python Query Returning
unknown ValueError</a></h3>
```

```
                        <p>I am trying to query specific Bloomberg tickers and
write them into an excel. The code itself is pretty straightforward and I
have gotten it to work for all tickers except "Move Index". When querying
for the this particular ticker, I am getting the exception: raise
ValueError(data) ValueError: []. I blocked out the particular query code
with try-except to get more information about the error, but it's still
returning the same exception with no further detail.</p>
                        <span class="tags">#c++ #qt #widget</span>
                    </div>
                </div>

                <div class="post">
                    <div class="votes">7 votes</div>
                    <div class="summary">
                        <h3><a href="#">Entrust to DigiCert SSL Certificate
Migration Asked today Modified today Viewed 5 times</a></h3>
                        <p> I got this email and I am not sure what I need to do
about it. I am using the AuthorizeNet.dll and I believe this is using <a href
=
"https://api.authorize.net/xml/v1/request.api">https://api.authorize.net/x
ml/v1/request.api</a> or <a href =
"https://apitest.authorize.net/xml/v1/request.api">https://apitest.authorize
.net/xml/v1/request.api</a>. So base on that I need to download a cert from
this url https://apitest.authorize.net/xml/v1/request.api but I am not seeing
anything related to the cert. Any help would be great.</p>
                        <span class="tags">#c++ #qt #widget</span>
                    </div>
                </div>

                <div class="post">
                    <div class="votes">675 votes</div>
                    <div class="summary">
                        <h3><a href="#">Blazor wasm app not updating on
refresh in development when non-c# changes are made in razor
files</a></h3>
                        <p>I have to stop the debugger and restart to see even the
simplest changes (such as simply changing a text value in a <p> tag) to
razor files.
                            I currently have it setup so that server pre-renders the
page and it does reflect updates but when the wasm app is loaded after a
couple seconds then it reverts back.
```

```
                              Hard refresh of the page doesn't help even when clearing
the cache. I can only see the changes in the wasm app after stopping and
restarting the debugger.
                                    It's very frustrating and time consuming to have to
restart the application to see every little html/css change I make.
                                Trying to find out if this is a known issue, or if there is
some setting or something I have to switch on or off?</p>
                            <span class="tags">#c++ #qt #widget</span>
                        </div>
                    </div>
                </main>
            </div>
        </div>
        </div>
    </div>
    <div class = "profile">
        <p>Profile</p>
    </div>
</body>
</html>
```

3. **Solargrah.html:**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
        <meta   name="viewport"   content="width=device-width,   initial-
scale=1.0">
    <title>Solar Energy Generation Graph</title>
    <script src="https://cdn.jsdelivr.net/npm/chart.js"></script>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 0;
            padding: 0;
            display: flex;
            height: 100vh;
            background-color: white;
        }
```

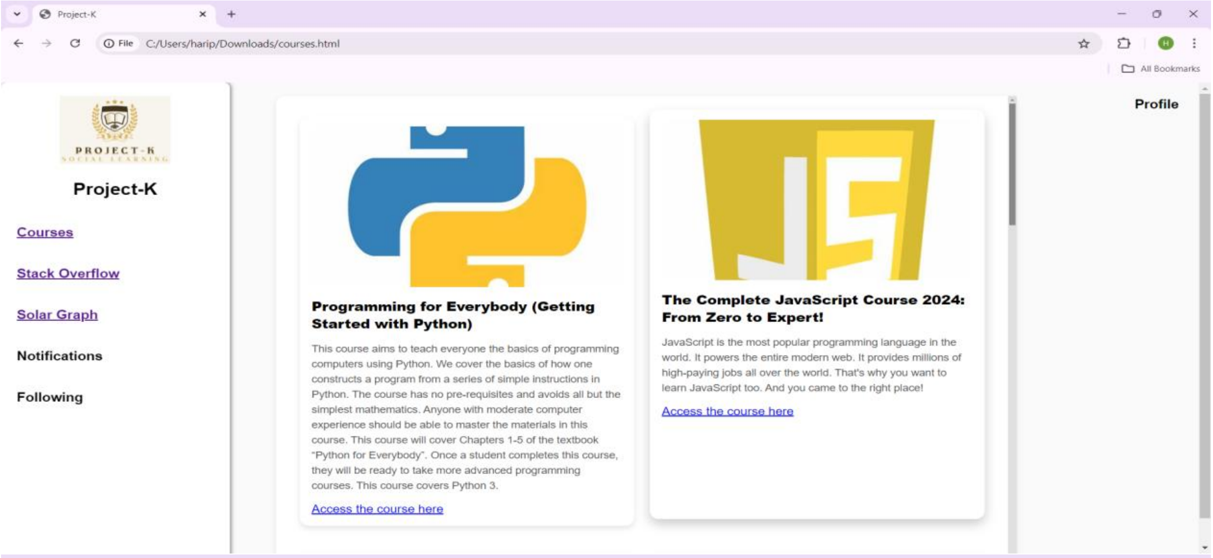
```
.container{
   text-align: center;
}

.a:visited{
   text-decoration: none;
}

.a:link{
   text-decoration: none;
}

.a:hover{
   text-decoration: none;
}

.a:active{
   text-decoration: none;
}

.side-menu {
   text-decoration: none;
   width: 250px;
   background-color: white;
   box-shadow: 2px 0 5px grey;
   display: flex;
   flex-direction: column;
   padding: 20px;
   border-radius: 8px;
   position: fixed;
   height: 100vh;
}

.menu-item {
   text-decoration: none;
   display: flex;
   align-items: center;
   margin: 20px 0;
   cursor: pointer;
}
```

```
.menu-item .text {
   font-size: 18px;
   font-weight: bold;
}

.menu-item:hover {
   background-color: #f0f0f0;
   border-radius: 10px;
   padding: 10px;
}

.menu-item .button {
   font-size: 18px;
   font-weight: bold;
}

main {
   width: 100%;
}

#solarChart {
   max-width: 800px;
   margin: 50px auto;
}
.content {
   display: none;
   margin-left: 200px;
}
.active {
   display: block;
}

.description{
   margin-left: 120px;
}
button {
   margin-left: 120px;
   text-align: center;
   display: flex;
   justify-content: center;
```

```
            gap: 15px;
            margin-top: 30px;
            height: 30px;
            width: auto;
            color:black;
            font-size: 20px;
            border-radius: 5px;
            cursor:pointer;
            transition: background-color 0.3s, color 0.3s;
        }
        button:hover {
            color: #333;
        }

        .profile{
            margin-top: 20px;
            margin-right: 25px;
            font-size: 18px;
            font-weight: bold;
            cursor: pointer;
            height: 25px;
            display: flex;
            align-items: center;
        }

        .profile:hover {
            background-color: #f0f0f0;
            border-radius: 10px;
            padding: 10px;
        }

        .graphdesc{
            margin-left: 120px;
        }

    </style>
</head>
<body onload="showHome()">

    <main>
        <div class="side-menu">
```

```
      <div class="container">
        <img src="logo.jpg" height="100px">
        <h2>Project-K</h2>
      </div>
      <div class="menu-item">
      <a href="courses.html">
        <span class="text">Courses</span>
      </a>
      </div>
      <div class="menu-item">
        <a href="collaborative coding platform.html">
        <span class="text">Stack Overflow</span>
        </a>
      </div>
      <div class="menu-item">
        <a href="solargraph.html">
        <span class="text">Solar Graph</span>
        </a>
      </div>
      <div class="menu-item">
        <span class="text">Notifications</span>
      </div>
      <div class="menu-item">
        <span class="text">Following</span>
      </div>
    </div>


    <!-- Home Content -->
    <div id="homeContent" class="content active">
       <p class = "description">This dashboard provides real-time data
about solar energy generation.</p>

            <button onclick="showGraph()"><strong>Solar Graph -
Day</strong></button>
             <button onclick="alert('Month graph not implemented
yet')"><strong>Solar Graph - Month</strong></button>
                   <button onclick="alert('Info not implemented
yet')"><strong>Info</strong></button>
    </div>
    <!-- Solar Graph Content -->
    <div id="solarGraphContent" class="content">
          <h1 class = "graphdesc">Solar Energy Generation Graph
(Day)</h1>
      <div>
        <canvas id="solarChart"></canvas>
      </div>
    </div>

  </main>

  <script>
    // Show Home content by default when the page loads
    function showHome() {
      document.getElementById('homeContent').classList.add('active');
      document.getElementById('solarGraphContent').classList.remove
('active');
    }

     // Show the graph content when the "Solar Graph - Day" button is
clicked
    function showGraph() {
       document.getElementById('homeContent').classList.remove('acti
ve');
      document.getElementById('solarGraphContent').classList.add('act
ive');
     loadSolarGraph(); // Load the graph only when the button is clicked
    }

    // Function to load the Solar Graph
    function loadSolarGraph() {
                                        const ctx =
document.getElementById('solarChart').getContext('2d');
      const solarChart = new Chart(ctx, {
        type: 'line',
        data: {
           labels: ['8 AM', '10 AM', '12 PM', '2 PM', '4 PM', '6 PM', '8
PM'], // X-axis labels (Time of day)
          datasets: [{
            label: 'Energy (kWh)',
                        data: [20, 50, 75, 100, 90, 60, 30],  // Example data (Y-axis,
solar energy in kWh)
                        borderColor: 'rgba(75, 192, 192, 1)',  // Line color
                        backgroundColor: 'rgba(75, 192, 192, 0.2)',  // Fill under the
line
                        fill: true,
                        tension: 0.4  // Line curve
                    }]
                },
                options: {
                    responsive: true,
                    scales: {
                        x: {
                            title: {
                                display: true,
                                text: 'Time of Day'
                            }
                        },
                        y: {
                            title: {
                                display: true,
                                text: 'Energy Generated (kWh)'
                            },
                            beginAtZero: true
                        }
                    }
                }
            });
        }
    </script>
    <div class = "profile">
        <p>Profile</p>
    </div>


</body>
</html>
```

OUTPUT:



Programming for Everybody (Getting Started with Python)

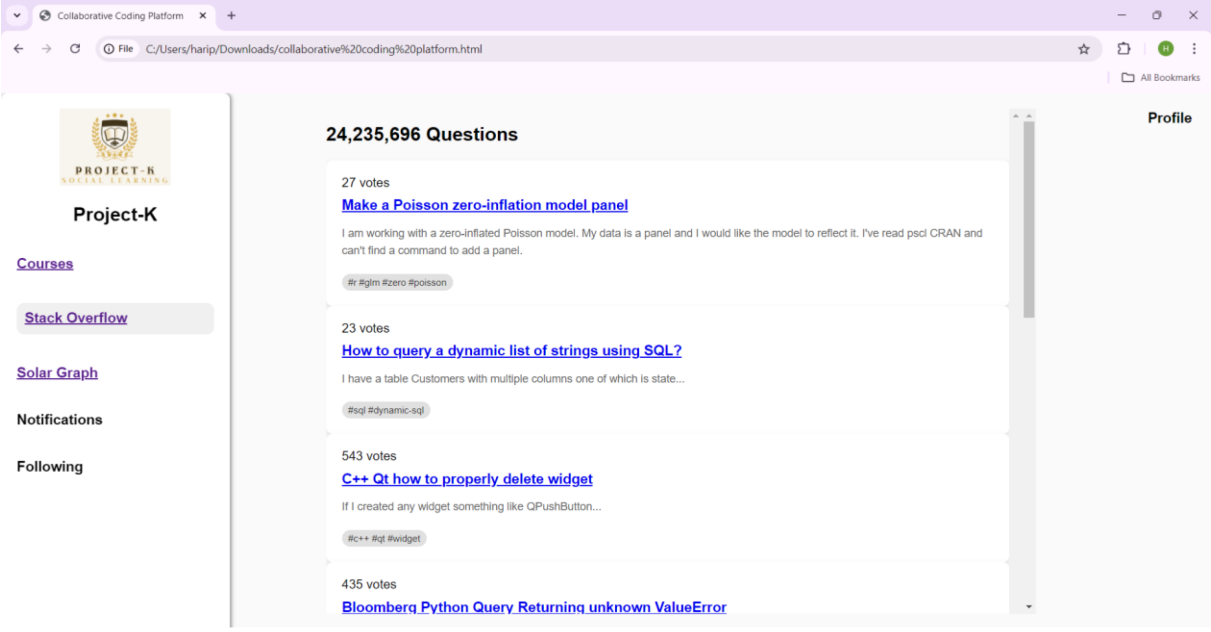
This course aims to teach everyone the basics of programming computers using Python. We cover the basics of how one constructs a program from a series of simple instructions in Python. The course has no pre-requisites and avoids all but the simplest mathematics. Anyone with moderate computer experience should be able to master the materials in this course. This course will cover Chapters 1-5 of the textbook "Python for Everybody". Once a student completes this course, they will be ready to take more advanced programming courses. This course covers Python 3.

Access the course here

The Complete JavaScript Course 2024: From Zero to Expert!

JavaScript is the most popular programming language in the world. It powers the entire modern web. It provides millions of high-paying jobs all over the world. That's why you want to learn JavaScript too. And you came to the right place!

Access the course here


Collaborative Coding Platform
File C:/Users/harip/Downloads/collaborative%20coding%20platform.html
All Bookmarks
PROJECT-K SOCIAL LEARNING
Project-K
Courses
Stack Overflow
Solar Graph
Notifications
Following
Profile

24,235,696 Questions

27 votes

Make a Poisson zero-inflation model panel

I am working with a zero-inflated Poisson model. My data is a panel and I would like the model to reflect it. I've read pscl CRAN and can't find a command to add a panel.

#r #glm #zero #poisson

23 votes

How to query a dynamic list of strings using SQL?

I have a table Customers with multiple columns one of which is state...

#sql #dynamic-sql

543 votes

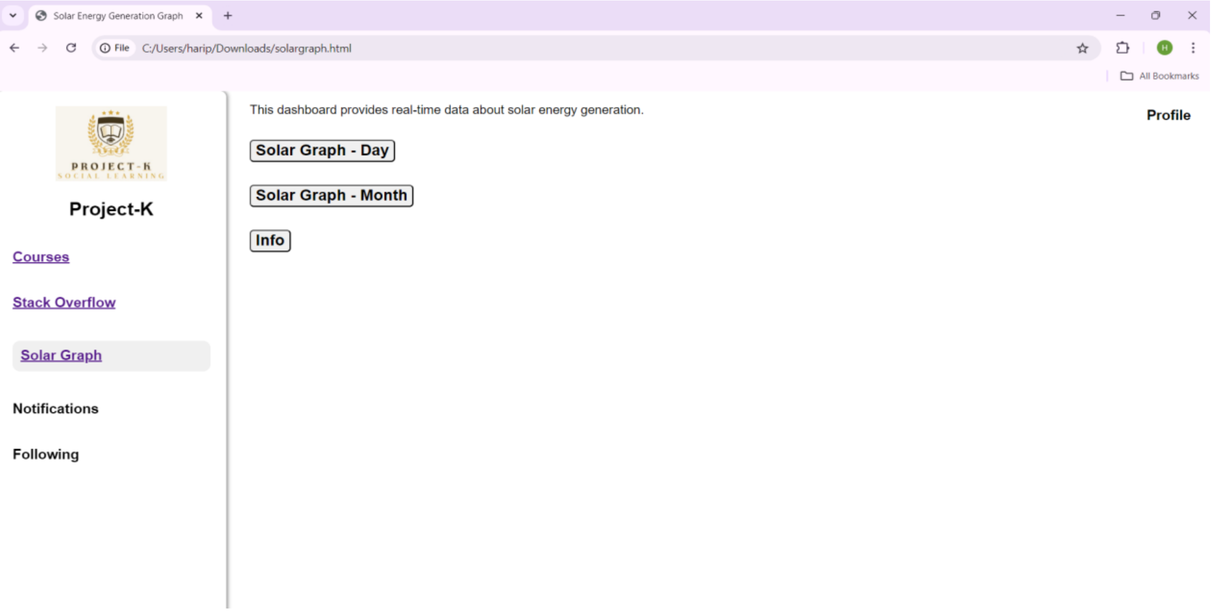
C++ Qt how to properly delete widget

If I created any widget something like QPushButton...

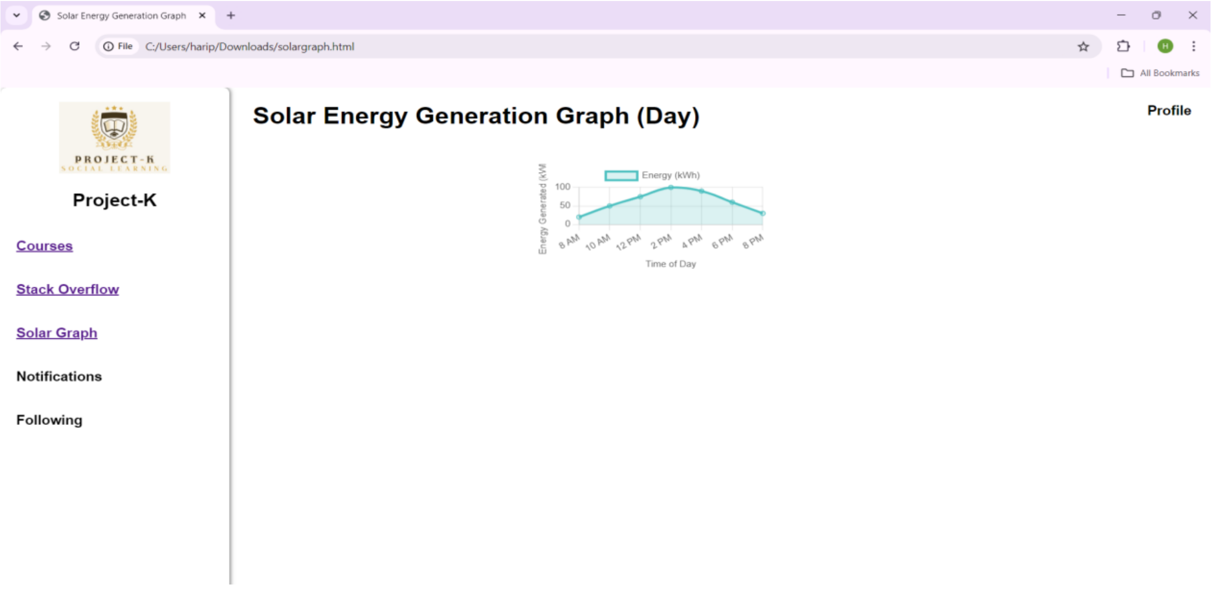
#c++ #qt #widget

435 votes

Bloomberg Python Query Returning unknown ValueError



This dashboard provides real-time data about solar energy generation.



Solar Energy Generation Graph (Day)

CONCLUSION

With its effective integration of several technical and instructional tools into a single platform, Project-K provides users with a strong environment for group problem-solving, collaborative learning, and data visualization. The project meets a range of user needs, from technical Q&A to obtaining programming tools and visualizing solar energy statistics, through its three main modules: the Collaboration Coding Platform, Courses Module, and Solar Energy Graph.

Project-K offers an intuitive interface with interactive elements and a tidy, responsive design. Because of its modular design, it is flexible and scalable, making it possible to integrate new features and make improvements in the future. Project-K helps users develop their coding abilities, receive access to useful learning resources, and gain insights from real-time data by creating a collaborative environment.

Community contributions are welcome as the project develops to enhance the functionality, usability, and performance of the platform. This documentation lays the groundwork for future development by offering a thorough overview of the platform as it stands right now.