

Build Your Own Virtual Assistant Workshop

React, Gemini, Google Cloud

February 1, 2025 @ 5:30 pm - 6:30 pm

Check-in



```
const filterStudies = (studies, filterByOrg) => {  
  return studies.filter(study => {  
    const status = filterByStatus ? study.status === filterByStatus : true  
    return (filterByOrg ? study.lead_organization === filterByOrg : true) && status  
  })  
}
```



Our Team



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```
org = filterByOrg ? study.leadOrganization : filterByOrg : c
status = filterByStatus ? study.status === filterByStatus : true
matchStatus) {
    function filterStudies({ studies, filterByOrg
    studies.filter(study
```

1

```
ReactDOM.createRoot(document.getElementById('root')).render(<App />);
```

2

App Component

```
export default function App() {  
  return <Greetings />;  
}
```

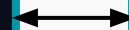
Greetings Component

```
export default function Greetings() {  
  return <h1>Hello, GDG</h1>;  
}
```



```
export default function App() {  
  return <Greetings name="GDG"/>;  
}
```

```
export default function Greetings(props) {  
  return <h1>Hello, {props.name}</h1>;  
}
```



React State Hook

```
export default function App() {  
  const [value, SetValue] = useState(0);  
  
  document.getElementById("incr_button").onclick = () => {  
    SetValue(value + 1);  
  };  
  
  document.getElementById("decr_button").onclick = () => {  
    if (value) {  
      SetValue(value - 1);  
    }  
  };  
  
  return (  
    <h1 id="click_statement">You clicked the buttons {value} times.</h1>  
  );  
}
```

The `<App />` Component is re-rendered every time `SetValue()` is called.

SetValue()

value

click_statement

React Effect Hook

```
export default function App() {  
  const [time, SetTime] = useState(0);  
  
  useEffect(() => {  
    const intervalId = setInterval(() => {  
      SetTime(time + 1);  
    }, 1000)  
  
    return () => {  
      clearInterval(intervalId);  
    };  
  });  
  
  return <h1>It has been {time} seconds.</h1>;  
}
```

} Code to run after each render.

} **Cleanup Function** to run every time the `<App />` Component is destroyed.





Virtual Assistant Project

```

    if (status === filterByOrg ? study.status === filterByStatus : true) {
      return matchStatus;
    }
  }

  function filterStudies({ studies, filterByOrg, filterByStatus }) {
    return studies.filter(study => filter(study, filterByOrg, filterByStatus));
  }
}

```



Pulling From GitHub

1. Pull the contents of the Web-Dev repository from GitHub into your local file system.
2. Navigate to your local repository.

These slides are available in the repository too.

```
git pull
```

```
https://github.com/GDSC-MSU/Web-Dev.git
```



Starter Repository

Install Packages

1. Install Node.js.
2. Install Google's Generative AI package in Node.js:
`npm install @google/generative-ai`
3. Install the **marked** package to convert from Markdown to HTML:
`npm install marked`



Acquiring Gemini API Key

1. Browse the following URL:

https://aistudio.google.com/apikey?_gl=1*dt3wl5*_ga*OTMzNjQ2ODAxLjE3Mzg3NjE1Nzl.*_ga_P1DBVKWT6V*MTczODM4MjQzOS4yLjEuMTczODM4MjQ0Ny41Mi4wLjEyMjQ3MDgzNjY.

2. Click on “Create API Key”.
3. Copy and save the API key as we will use it soon.





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Live Demo: Virtual Assistant Project

```
org = filterByOrg ? study.lead_organization == filterByOrg : true  
status = filterByStatus ? study.status == filterByStatus : true  
matchStatus) {  
    return filterStudies({ studies, filterByOrg, filterByStatus, filterByStatus })  
}
```

Deploying on Google Cloud using Cloud Run

1. Need a Google Cloud Account (\$300 GCP credits as a part of free trial) - <https://console.cloud.google.com>
2. Navigate to Cloud Run product on the console.
3. Choose a Github repository to host.
4. Select the configurations for ingres, security etc.
5. Your website is deployed within minutes!



Check-in

Thank you!

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