0:0:0.0 --> 0:0:0.170  
Bibhuranjan Mohanty  
No.

0:0:2.620 --> 0:0:2.780  
Bibhuranjan Mohanty  
Yeah.

0:0:6.70 --> 0:0:8.120  
Bibhuranjan Mohanty  
You can simply write code dot.

0:0:14.450 --> 0:0:18.940  
Bibhuranjan Mohanty  
And here you will file find the project structure OK.

0:0:19.360 --> 0:0:30.730  
Bibhuranjan Mohanty  
Actually in Angular 70 some changes I've has been done and it is by default generating what in a stand alone application.

0:0:31.800 --> 0:0:33.590  
Bibhuranjan Mohanty  
OK, don't stand alone.

0:0:33.600 --> 0:0:37.170  
Bibhuranjan Mohanty  
Component means here it is not creating any module.

0:0:37.380 --> 0:0:37.850  
Bibhuranjan Mohanty  
OK.

0:0:37.940 --> 0:0:39.760  
Bibhuranjan Mohanty  
So earlier to this.

0:0:41.930 --> 0:0:43.930  
Bibhuranjan Mohanty  
A little to this person. Just.

0:0:53.680 --> 0:0:59.10  
Bibhuranjan Mohanty  
So you can see if we we are looking at this app.

0:0:59.360 --> 0:1:0.590  
Bibhuranjan Mohanty  
Ohh folder.

0:1:1.720 --> 0:1:2.790  
Bibhuranjan Mohanty  
Here's a module.

0:1:3.570 --> 0:1:5.490  
Bibhuranjan Mohanty  
Is there OK?

0:1:5.550 --> 0:1:7.10  
Bibhuranjan Mohanty  
But in this in this.

0:1:9.190 --> 0:1:10.200  
Bibhuranjan Mohanty  
Listen with you.

0:1:10.260 --> 0:1:26.330  
Bibhuranjan Mohanty  
I have created first so here there is no model file app Dot module file OHS and was there in the previous version but in this version it is not because by default it is creating what the standalone ohh application.

0:1:26.470 --> 0:1:38.660  
Bibhuranjan Mohanty  
OK, so I we do not require this one standalone component application with request module based application which was supported in Angular 15 OK.

0:1:40.860 --> 0:1:50.0  
Bibhuranjan Mohanty  
So what I will do well, so you need need to why creating you need just a simple this flag stand alone equal to false.

0:1:50.10 --> 0:1:50.340  
Bibhuranjan Mohanty  
OK.

0:1:50.750 --> 0:2:0.790  
Bibhuranjan Mohanty  
So you just everybody, I try to create a new project angular project by typing Ng new.

0:2:1.650 --> 0:2:3.970  
Bibhuranjan Mohanty  
Then suppose I'm writing my.

0:2:8.160 --> 0:2:8.340  
Bibhuranjan Mohanty  
And.

0:2:11.930 --> 0:2:12.490  
Bibhuranjan Mohanty  
Them all.

0:2:14.30 --> 0:2:21.30  
Bibhuranjan Mohanty  
So you can give the project name like this and then you need to put this flag.

0:2:23.510 --> 0:2:25.970  
Bibhuranjan Mohanty  
This is the hyphen, hyphen standalone equal to false.

0:2:27.280 --> 0:2:33.340  
Bibhuranjan Mohanty  
So for the timing you just do it, I I will discuss what what is the requirement of this?

0:2:39.780 --> 0:2:40.0  
Bibhuranjan Mohanty  
So.

0:2:43.570 --> 0:2:44.410  
Bibhuranjan Mohanty  
Is something else.

0:2:46.300 --> 0:2:46.700  
Bibhuranjan Mohanty  
That's.

0:2:58.880 --> 0:2:59.30  
Bibhuranjan Mohanty  
It's.

0:3:1.770 --> 0:3:3.980  
Bibhuranjan Mohanty  
It's just go to drive directly.

0:3:4.610 --> 0:3:4.810  
Bibhuranjan Mohanty  
OK.

0:3:5.610 --> 0:3:11.520  
Bibhuranjan Mohanty  
We enough then you write Ng knew your project name.

0:3:13.450 --> 0:3:17.580  
Bibhuranjan Mohanty  
Let me know you can see demo then I've been happen.

0:3:21.220 --> 0:3:23.600  
Bibhuranjan Mohanty  
Standalone equal 2 false.

0:3:26.890 --> 0:3:29.220  
Bibhuranjan Mohanty  
In what it is showing, you know just in.

0:3:33.900 --> 0:3:35.640  
Bibhuranjan Mohanty  
And then once.

0:3:41.990 --> 0:3:43.370  
Bibhuranjan Mohanty  
Just go to the D drive.

0:3:47.70 --> 0:3:49.570  
Bibhuranjan Mohanty  
OK, so they said said CD double dot.

0:3:49.580 --> 0:3:58.670  
Bibhuranjan Mohanty  
You just write CT double dot then you write because I I was trying to get the new project within another project.

0:3:58.680 --> 0:4:0.140  
Bibhuranjan Mohanty  
That's why it was the problem.

0:4:0.150 --> 0:4:11.320  
Bibhuranjan Mohanty  
Now you just directly go to the drive, then you type this one, then it is asking you about the CSS which one you want to use those type CSS.

0:4:28.300 --> 0:4:36.520  
Bibhuranjan Mohanty  
Then just place no and it is just trying to create your by locally, but you brought it.

0:5:11.50 --> 0:5:12.920  
Bibhuranjan Mohanty  
So it will take a little bit of time.

0:5:25.610 --> 0:5:28.430  
Bibhuranjan Mohanty  
It also depends upon the network speed.

0:5:28.560 --> 0:5:36.130  
Bibhuranjan Mohanty  
OK, if your network speed is good then installation will see successfully and was very faster.

0:5:36.190 --> 0:5:43.720  
Bibhuranjan Mohanty  
Now the project has been created and then what I'm going to see my folder.

0:5:45.140 --> 0:5:47.670  
Bibhuranjan Mohanty  
So this is uh Ng demo I have given.

0:5:47.820 --> 0:5:52.250  
Bibhuranjan Mohanty  
Let let me go to that folder that is called NGC them.

0:5:53.630 --> 0:5:55.970  
Bibhuranjan Mohanty  
You can give any name of your process.

0:5:56.530 --> 0:5:58.930  
Bibhuranjan Mohanty  
Then you just open it in the VS food.

0:6:0.140 --> 0:6:15.230  
Bibhuranjan Mohanty  
Now your project has been created, so this is this is the way you just try to create your project just for the timing you write standalone record to false because we need the model based development because I need module inside this.

0:6:16.200 --> 0:6:39.240  
Bibhuranjan Mohanty  
Once we clear with, once we clear whether development of project with the module like what is exactly module, I will also discuss it for the time you just see this process a layout or structure has been created now and now we need to understand what are the different files and what are their roles and responsibilities.

0:6:39.530 --> 0:6:42.110  
Bibhuranjan Mohanty  
We are going to discuss all these, these things.

0:6:44.50 --> 0:6:49.110  
Bibhuranjan Mohanty  
So you see in your project this is your project engine demo.

0:6:49.180 --> 0:6:51.630  
Bibhuranjan Mohanty  
Inside it you will find some folder.

0:6:52.0 --> 0:6:55.870  
Bibhuranjan Mohanty  
This folder is for VS code ID editor.

0:6:56.600 --> 0:7:1.600  
Bibhuranjan Mohanty  
Then this is the node modules where all your node packages node libraries.

0:7:3.640 --> 0:7:10.690  
Bibhuranjan Mohanty  
Are added so you can see all the necessary and packages.

0:7:10.700 --> 0:7:12.60  
Bibhuranjan Mohanty  
No packages are available here.

0:7:13.200 --> 0:7:21.350  
Bibhuranjan Mohanty  
Then there is another folder that is called SRC and you can able to see these are the different files.

0:7:21.480 --> 0:7:23.270  
Bibhuranjan Mohanty  
This is editor config file.

0:7:23.420 --> 0:7:40.620  
Bibhuranjan Mohanty  
This is Kitty ignore file then angular Jason package lock dot Jason, package dot Jason read me then TS config app Jason TS config Jason TS this PC dot Jason.

0:7:40.790 --> 0:7:48.300  
Bibhuranjan Mohanty  
So these are the files which is created and all files are being their responsibility for maintaining managing your project.

0:7:48.430 --> 0:7:48.670  
Bibhuranjan Mohanty  
OK.

0:7:50.140 --> 0:8:19.90  
Bibhuranjan Mohanty  
And the most important folder where you are going to write your code that is your SRC folder you are going to write all your code within this SRC folder and the SRC folder contains what your components and you can see here any assets like your CSS, your images you can put inside this folder and this is the fab icon for your bookmark of your site.

0:8:19.100 --> 0:8:26.330  
Bibhuranjan Mohanty  
You can add any ISO image here that is used inside this index dot SHTML.

0:8:27.650 --> 0:8:29.580  
Bibhuranjan Mohanty  
Then there is main dot TS5.

0:8:29.790 --> 0:8:34.140  
Bibhuranjan Mohanty  
Then for global styling there is a style, not CS5.

0:8:34.320 --> 0:8:38.320  
Bibhuranjan Mohanty  
So this all present inside your SRC folder.

0:8:38.790 --> 0:8:55.790  
Bibhuranjan Mohanty  
Actually we are going to work inside this SRC folder if I I want to create any component then that is going to create inside this app OK and one by one we are going to understand the structure of this project.

0:8:57.400 --> 0:9:1.540  
Bibhuranjan Mohanty  
OK, so before this, let's run this up first.

0:9:2.220 --> 0:9:6.130  
Bibhuranjan Mohanty  
Then how can you run who just open the top Miller.

0:9:6.700 --> 0:9:15.190  
Bibhuranjan Mohanty  
And here ohh you just create the command, use the command prompt because power cell is not working in my case.

0:9:15.280 --> 0:9:21.660  
Bibhuranjan Mohanty  
If we in your case it is working then it's working then you you can write here.

0:9:22.90 --> 0:9:27.100  
Bibhuranjan Mohanty  
So you do one thing, you just create 2 terminal.

0:9:30.20 --> 0:9:33.960  
Bibhuranjan Mohanty  
OK, so first and middle, you just give its name our server.

0:9:37.660 --> 0:9:42.490  
Bibhuranjan Mohanty  
And here we are going to uh, create our component through in the CLI.

0:9:42.860 --> 0:9:50.620  
Bibhuranjan Mohanty  
That's why I'm giving its name as CLI, OK and in this I'm going to run my application.

0:9:51.30 --> 0:9:52.480  
Bibhuranjan Mohanty  
So how can you run?

0:9:53.70 --> 0:9:55.280  
Bibhuranjan Mohanty  
You just see Ng song.

0:9:58.430 --> 0:10:0.830  
Bibhuranjan Mohanty  
Simple for the timing I will write in this one.

0:10:5.110 --> 0:10:25.780  
Bibhuranjan Mohanty  
So just place no and well so it will start building your application after successful building it is opening your application in the default port that is called 42 double G Now this swing OK how it is showing how it is coming here.

0:10:26.90 --> 0:10:31.220  
Bibhuranjan Mohanty  
So let's understand first here what I have done.

0:10:31.290 --> 0:10:36.740  
Bibhuranjan Mohanty  
Angie saw, and this is the script comment where this comment has been written.

0:10:37.130 --> 0:10:39.740  
Bibhuranjan Mohanty  
So we need to see the 1st.

0:10:39.750 --> 0:10:46.940  
Bibhuranjan Mohanty  
I'm going to this package or Jason, you can see here in this order has been written.

0:10:47.150 --> 0:10:49.790  
Bibhuranjan Mohanty  
Yes or no. OK.

0:10:50.100 --> 0:10:51.790  
Bibhuranjan Mohanty  
And the package dot say Jason.

0:10:53.840 --> 0:11:2.640  
Bibhuranjan Mohanty  
It's responsible for managing work configuring all though N packages N languages.

0:11:2.750 --> 0:11:15.550  
Bibhuranjan Mohanty  
OK, whatever libraries, node libraries, node packages used inside this project, they are all registered where in the package dot Jason file.

0:11:16.180 --> 0:11:24.470  
Bibhuranjan Mohanty  
OK, now you can see in the package dot Jason file you will see this is the IT is showing your name of the project.

0:11:24.940 --> 0:11:28.510  
Bibhuranjan Mohanty  
Here it is showing the which version of the project you are using.

0:11:29.100 --> 0:11:31.90  
Bibhuranjan Mohanty  
Then all the scripts.

0:11:31.280 --> 0:11:35.580  
Bibhuranjan Mohanty  
So these scripts using these scripts what you are doing you are.

0:11:37.110 --> 0:11:48.840  
Bibhuranjan Mohanty  
Execute running your application you are building your application OK, so if you do not want to use Ng sub simply you can directly write NPM start.

0:11:49.50 --> 0:11:55.20  
Bibhuranjan Mohanty  
If you are write NPM start then indirectly it is going to call you Ng soft.

0:11:55.30 --> 0:12:0.140  
Bibhuranjan Mohanty  
Similarly, if you want to build your application then simply you write NPM build.

0:12:1.60 --> 0:12:1.630  
Bibhuranjan Mohanty  
OK.

0:12:1.700 --> 0:12:4.380  
Bibhuranjan Mohanty  
So we can see that also for the timing.

0:12:4.390 --> 0:12:10.850  
Bibhuranjan Mohanty  
Let me close this applications you press control C then your application will running will be closed.

0:12:11.420 --> 0:12:18.170  
Bibhuranjan Mohanty  
Everybody clear now I can run the same application so that I mean let's remove close this one.

0:12:19.560 --> 0:12:21.880  
Bibhuranjan Mohanty  
I cannot NPM.

0:12:25.80 --> 0:12:26.820  
Bibhuranjan Mohanty  
Stack so you can see.

0:12:29.400 --> 0:12:43.470  
Bibhuranjan Mohanty  
It is calling this the script I I just have called and internally it is calling in this so everybody clear OK and there is a flag that is called hypen O are open.

0:12:44.610 --> 0:12:45.380  
Bibhuranjan Mohanty  
So what is?

0:12:45.450 --> 0:12:47.700  
Bibhuranjan Mohanty  
If you write hyphen no then what will happen?

0:12:50.530 --> 0:12:51.570  
Bibhuranjan Mohanty  
Let me close again.

0:12:53.770 --> 0:12:53.950  
Bibhuranjan Mohanty  
Yes.

0:12:58.380 --> 0:13:6.810  
Bibhuranjan Mohanty  
Now I have added hypno then automatically after successful build your application will open in the browser.

0:13:6.920 --> 0:13:12.110  
Bibhuranjan Mohanty  
You don't require to click on the OR use the LOCALHOST 4200.

0:13:14.210 --> 0:13:16.520  
Bibhuranjan Mohanty  
Now you just see I'm writing NPM.

0:13:18.690 --> 0:13:19.110  
Bibhuranjan Mohanty  
Start.

0:13:22.220 --> 0:13:30.920  
Bibhuranjan Mohanty  
So it is calling this one and start building and you can see directly it is opening your URL in the browser.

0:13:30.970 --> 0:13:31.570  
Bibhuranjan Mohanty  
So this is the.

0:13:33.380 --> 0:13:38.460  
Bibhuranjan Mohanty  
OK, so for the time being we we will use this one uh.

0:13:38.670 --> 0:13:46.890  
Bibhuranjan Mohanty  
And while you are building your application, building means when you need to deploy your application somewhere else, then at that time you need to build your application.

0:13:46.980 --> 0:13:49.330  
Bibhuranjan Mohanty  
So it will minify all the JavaScript.

0:13:49.340 --> 0:13:52.630  
Bibhuranjan Mohanty  
It will create bundles, all the CSS, everything.

0:13:53.120 --> 0:13:56.510  
Bibhuranjan Mohanty  
Then you can deploy this application somewhere else.

0:13:56.520 --> 0:14:14.360  
Bibhuranjan Mohanty  
OK, so in that case we need build then you can also use what's for watching your execution flow and this for unit testing if you want to taste your application then you can run this script that is per task any additional script if you are.

0:14:14.490 --> 0:14:23.190  
Bibhuranjan Mohanty  
If you required NPM related script then you can configure here everybody clear OK for the time being we will focus only this one.

0:14:23.480 --> 0:14:36.930  
Bibhuranjan Mohanty  
We are not focusing on others and now you can see all the dependencies, dependencies means all the angular libraries you are used in your process that has been registered here with their version.

0:14:37.270 --> 0:14:40.910  
Bibhuranjan Mohanty  
But my point, OK, so there is an emission.

0:14:40.920 --> 0:14:41.990  
Bibhuranjan Mohanty  
Common compiler.

0:14:42.0 --> 0:14:44.310  
Bibhuranjan Mohanty  
This is very important for Angular core.

0:14:44.840 --> 0:14:52.270  
Bibhuranjan Mohanty  
All the core features and if you want to deal with the angular forms then this library is responsible for that.

0:14:52.580 --> 0:14:56.280  
Bibhuranjan Mohanty  
Then for your browser dynamics, for it is.

0:14:58.600 --> 0:15:7.900  
Bibhuranjan Mohanty  
That go if we'll all what allow the feature or add the feature for browser compatibility to enable the routing.

0:15:8.650 --> 0:15:11.420  
Bibhuranjan Mohanty  
Then liabilities required.

0:15:11.920 --> 0:15:22.840  
Bibhuranjan Mohanty  
OK, so if you need any other uh and PM library or any angular library, everything is going to add here node libraries.

0:15:23.170 --> 0:15:30.740  
Bibhuranjan Mohanty  
Similarly, while developing your application you need some tools, some like your CLA angular CLI.

0:15:31.90 --> 0:15:32.800  
Bibhuranjan Mohanty  
This is all below.

0:15:32.950 --> 0:15:38.260  
Bibhuranjan Mohanty  
This is the package which is used while developing the application.

0:15:38.670 --> 0:15:49.240  
Bibhuranjan Mohanty  
OK, for unit testing you need something and while for writing the TypeScript without TypeScript package you cannot write TypeScript code.

0:15:49.430 --> 0:15:52.220  
Bibhuranjan Mohanty  
So that's why TypeScript has been added here.

0:15:52.650 --> 0:15:59.180  
Bibhuranjan Mohanty  
OK, all these libraries, all these packages are responsible or used while developing application.

0:15:59.230 --> 0:16:8.250  
Bibhuranjan Mohanty  
I don't require them while I deploy my application, so in that when you are building your application all these packages are not going to include.

0:16:8.790 --> 0:16:16.200  
Bibhuranjan Mohanty  
Everybody clear only development time, so this is all about the usage of package dot Jason.

0:16:17.450 --> 0:16:42.930  
Bibhuranjan Mohanty  
Similarly, a while you write NPM install OK when you are creating your application at that time this package locked or JSON has been created and this package lot log dot Jason file it's the responsible that it ensures the proper version of packages should be maintained while deployment.

0:16:43.700 --> 0:16:49.550  
Bibhuranjan Mohanty  
So this is every back just station in a in a node.

0:16:50.400 --> 0:16:54.720  
Bibhuranjan Mohanty  
OK, it's respective package locked or Jason has been created.

0:16:55.630 --> 0:16:56.240  
Bibhuranjan Mohanty  
OK.

0:16:56.310 --> 0:17:5.530  
Bibhuranjan Mohanty  
And this it's only responsibility is that it is ensuring the version which you have used in your closet while deployment.

0:17:5.810 --> 0:17:18.100  
Bibhuranjan Mohanty  
If you you have changed anything here and but package dot log will ensure that you have used the correct version of what a packages.

0:17:18.280 --> 0:17:26.840  
Bibhuranjan Mohanty  
So here also same thing whatever dependencies you have used that is present in the package dot Jason as well as in the package dot log.

0:17:27.620 --> 0:17:35.740  
Bibhuranjan Mohanty  
Similarly, any any package you are adding here that is also you can see they have different and also President.

0:17:37.20 --> 0:17:37.230  
Bibhuranjan Mohanty  
OK.

0:17:38.70 --> 0:17:40.820  
Bibhuranjan Mohanty  
So in addition to this, there is other two files.

0:17:40.830 --> 0:17:41.550  
Bibhuranjan Mohanty  
One is kit.

0:17:42.660 --> 0:17:49.830  
Bibhuranjan Mohanty  
OK, so for maintaining your code repository, you may add it or vented this project through the gate.

0:17:50.160 --> 0:18:1.660  
Bibhuranjan Mohanty  
OK, so while you upload this into the remote repository, then you want some of the files should not go to the repository.

0:18:7.660 --> 0:18:8.170  
Bibhuranjan Mohanty  
Partner.

0:18:15.40 --> 0:18:15.210  
Bibhuranjan Mohanty  
What?

0:18:20.320 --> 0:18:22.850  
Bibhuranjan Mohanty  
Anybody who are from Patna office.

0:18:24.940 --> 0:18:25.80  
SARFARAZ ALAM  
Yes.

0:18:24.920 --> 0:18:25.310  
Bibhuranjan Mohanty  
And you know.

0:18:30.110 --> 0:18:30.500  
Bibhuranjan Mohanty  
Welcome.

0:18:35.320 --> 0:18:35.670  
Bibhuranjan Mohanty  
We got.

0:18:35.110 --> 0:18:35.740  
SARFARAZ ALAM  
Yes, it will be.

0:18:36.380 --> 0:18:40.890  
Bibhuranjan Mohanty  
Yeah, you pretty much put the beach between what the difference now?

0:18:40.900 --> 0:18:43.300  
Bibhuranjan Mohanty  
Gonna assessment you weekend?

0:18:45.10 --> 0:18:46.580  
Bibhuranjan Mohanty  
More tickets, more JavaScript.

0:18:53.60 --> 0:18:53.340  
Bibhuranjan Mohanty  
OK.

0:19:0.430 --> 0:19:2.660  
Bibhuranjan Mohanty  
OK, here let's see.

0:19:6.150 --> 0:19:6.800  
Bibhuranjan Mohanty  
This is great.

0:19:6.810 --> 0:19:7.130  
Bibhuranjan Mohanty  
Ignore.

0:19:7.850 --> 0:19:16.690  
Bibhuranjan Mohanty  
So while I who's my code to the remote triple jittery, then these are the things is not going to.

0:19:19.90 --> 0:19:21.400  
Bibhuranjan Mohanty  
Upload or post into the.

0:19:21.830 --> 0:19:23.540  
Bibhuranjan Mohanty  
I will ignore this node module.

0:19:23.550 --> 0:19:30.700  
Bibhuranjan Mohanty  
I don't require to add only those things which are not present at the gift ignored file that is going to host.

0:19:30.770 --> 0:19:32.640  
Bibhuranjan Mohanty  
So that is the use of gitignore.

0:19:32.650 --> 0:19:44.60  
Bibhuranjan Mohanty  
It is automatically created by your while you are creating the process and similarly there is a read me dot MPP file where you can write some description related to your project.

0:19:44.470 --> 0:19:45.40  
Bibhuranjan Mohanty  
OK.

0:19:45.150 --> 0:19:53.870  
Bibhuranjan Mohanty  
And some instruction how your project you are running you will run and already you can see some minimal information related to a project has been added.

0:19:53.880 --> 0:19:57.40  
Bibhuranjan Mohanty  
Here you may modify this one as per your requirement.

0:19:57.970 --> 0:20:0.910  
Bibhuranjan Mohanty  
So this this file, everybody clear.

0:20:1.940 --> 0:20:11.860  
Bibhuranjan Mohanty  
I'm prepared to document for and here I will say that this one to you, you you can go through for understanding the details.

0:20:11.990 --> 0:20:13.80  
Bibhuranjan Mohanty  
Now you can see this.

0:20:13.150 --> 0:20:14.970  
Bibhuranjan Mohanty  
This is the description I have.

0:20:16.670 --> 0:20:21.250  
Bibhuranjan Mohanty  
But the 10 year, what is editor config?

0:20:21.590 --> 0:20:25.320  
Bibhuranjan Mohanty  
So this is the configuration file for Visual Studio code editor.

0:20:26.390 --> 0:20:36.890  
Bibhuranjan Mohanty  
OK, so if you need some extra configuration to your Visual Studio code, how can you do this so you can see this tutorial?

0:20:36.900 --> 0:20:49.810  
Bibhuranjan Mohanty  
Also, there is editor uh config dot towards you go through this tutorial and you can do some configuration as per your requirement for the timing it is not required in our case.

0:20:50.380 --> 0:20:54.410  
Bibhuranjan Mohanty  
Ohh, just if you find time then you go through this.

0:20:54.590 --> 0:21:1.210  
Bibhuranjan Mohanty  
This is not that much of important and another important thing was angular tojson OK.

0:21:3.230 --> 0:21:9.860  
Bibhuranjan Mohanty  
So while we start our developing our project, then we will again going to use all these things.

0:21:9.870 --> 0:21:15.370  
Bibhuranjan Mohanty  
So today I'm just giving you the overview, so now you can see this angular to Jason.

0:21:17.310 --> 0:21:18.660  
Bibhuranjan Mohanty  
Here it is.

0:21:18.670 --> 0:21:22.360  
Bibhuranjan Mohanty  
It is one of the core and important file, so here you can see.

0:21:24.630 --> 0:21:27.150  
Bibhuranjan Mohanty  
It's uh, there are all configurations.

0:21:30.990 --> 0:21:36.130  
Bibhuranjan Mohanty  
So you can see it is defining there to where you're all assets will be present.

0:21:36.750 --> 0:21:39.90  
Bibhuranjan Mohanty  
So here it is showing the source asset.

0:21:39.310 --> 0:21:56.80  
Bibhuranjan Mohanty  
So where your global style and any other your style, if you want to add in a project then you need to add it here any any external Java any JavaScript file you create your own then you want to add here then this is also OK.

0:21:56.210 --> 0:21:58.820  
Bibhuranjan Mohanty  
So you need to add where in the angular dot Jason.

0:21:59.170 --> 0:22:9.190  
Bibhuranjan Mohanty  
OK, I can also show you suppose so I I will uh no develop one application using bootstrap library then what can I need it.

0:22:9.440 --> 0:22:16.870  
Bibhuranjan Mohanty  
I need to download the bootstrap package, then it's bootstraps CSS path and JavaScript part.

0:22:16.940 --> 0:22:20.640  
Bibhuranjan Mohanty  
I need to register in the angular Jason file.

0:22:21.550 --> 0:22:25.60  
Bibhuranjan Mohanty  
Then I can able to use bootstrap feature in my process.

0:22:25.620 --> 0:22:26.130  
Bibhuranjan Mohanty  
Everybody clear?

0:22:26.970 --> 0:22:27.870  
Bibhuranjan Mohanty  
So how can you do?

0:22:28.730 --> 0:22:29.420  
Bibhuranjan Mohanty  
Simple.

0:22:29.850 --> 0:22:33.250  
Bibhuranjan Mohanty  
You can see if you go to the bootstrap so.

0:22:44.60 --> 0:22:44.210  
Bibhuranjan Mohanty  
So.

0:22:46.350 --> 0:22:57.580  
Bibhuranjan Mohanty  
You can see here or there is a different NPM install bootstrap so any node package you need you just need to install through this.

0:22:57.650 --> 0:23:4.40  
Bibhuranjan Mohanty  
Let me do this one so that you can able to get some idea relate what is the use of angular processing.

0:23:4.490 --> 0:23:13.600  
Bibhuranjan Mohanty  
So what I will do, I'm going to because for the timing, if you'll see in the node module there is no bootstrap.

0:23:16.800 --> 0:23:18.510  
Bibhuranjan Mohanty  
Please go to this.

0:23:19.20 --> 0:23:20.730  
Bibhuranjan Mohanty  
There is no bootstrap folder.

0:23:20.740 --> 0:23:23.700  
Bibhuranjan Mohanty  
You will get on OK.

0:23:23.740 --> 0:23:26.870  
Bibhuranjan Mohanty  
So that is now what I'm doing.

0:23:27.50 --> 0:23:28.550  
Bibhuranjan Mohanty  
I'm going to install this bootstrap.

0:23:31.380 --> 0:23:34.290  
Bibhuranjan Mohanty  
So simple you write NPM install bootstrap.

0:23:37.720 --> 0:23:39.840  
Bibhuranjan Mohanty  
So now they put stuff has been installed.

0:23:40.910 --> 0:23:43.10  
Bibhuranjan Mohanty  
Ohh, let's see that let's refresh this one.

0:23:59.20 --> 0:24:3.890  
Bibhuranjan Mohanty  
So now this bootstrap package has been added in your application.

0:24:4.240 --> 0:24:10.900  
Bibhuranjan Mohanty  
Then as we know, it is, uh, every CSS and JavaScript is present inside the list.

0:24:11.970 --> 0:24:19.590  
Bibhuranjan Mohanty  
Then this is your uh CSS then bootstrap dot CS file is there.

0:24:19.900 --> 0:24:23.570  
Bibhuranjan Mohanty  
I need this one so then what is my path now?

0:24:28.790 --> 0:24:35.760  
Bibhuranjan Mohanty  
So if I want to add the path of the bootstrap then I will add like this this is.

0:24:46.440 --> 0:24:49.570  
Bibhuranjan Mohanty  
Struck then CS.

0:24:55.790 --> 0:24:58.630  
Bibhuranjan Mohanty  
Who's dropped down CSS?

0:24:59.740 --> 0:25:0.90  
Bibhuranjan Mohanty  
Is it clear?

0:25:1.200 --> 0:25:7.840  
Bibhuranjan Mohanty  
Similarly, you can also add your JavaScript bootstrap dot JS file.

0:25:10.690 --> 0:25:12.990  
Bibhuranjan Mohanty  
So this one it is present in the chase.

0:25:13.270 --> 0:25:14.70  
Bibhuranjan Mohanty  
You simple right?

0:25:21.810 --> 0:25:30.620  
Bibhuranjan Mohanty  
OK, so from this what we clear that any third party library means node library I will use in my project.

0:25:32.520 --> 0:25:32.760  
Bibhuranjan Mohanty  
Uh-huh.

0:25:36.160 --> 0:25:39.630  
Bibhuranjan Mohanty  
Repeat means it's now OK.

0:25:39.640 --> 0:25:48.790  
Bibhuranjan Mohanty  
Again I you need so first of all what I have done I just have installed this is clear then what I would do.

0:25:50.300 --> 0:25:55.970  
Bibhuranjan Mohanty  
I just go to the node module, hold up inside the node module.

0:25:55.980 --> 0:26:8.690  
Bibhuranjan Mohanty  
I'm finding the bootstrap folder once I installed it you can able to see the bootstrap folder is present then you go see the distribution folder in.

0:26:11.260 --> 0:26:13.810  
Bibhuranjan Mohanty  
But you said I I missed this one do.

0:26:13.880 --> 0:26:15.160  
Bibhuranjan Mohanty  
Under Bootstrap there is.

0:26:17.680 --> 0:26:19.490  
Bibhuranjan Mohanty  
E support.

0:26:22.670 --> 0:26:23.60  
Bibhuranjan Mohanty  
Here also.

0:26:26.40 --> 0:26:28.710  
Bibhuranjan Mohanty  
These then go to CS folder.

0:26:28.820 --> 0:26:32.910  
Bibhuranjan Mohanty  
Inside the CSS you'll find this would stop dot CS.

0:26:33.380 --> 0:26:33.590  
Bibhuranjan Mohanty  
OK.

0:26:35.240 --> 0:26:45.70  
Bibhuranjan Mohanty  
Again, in the JavaScript you just find the bootstrap dot JS you article, so once you aren't then now you proceed.

0:26:46.590 --> 0:26:48.850  
Bibhuranjan Mohanty  
No, in your project you can use bootstrap features.

0:26:50.490 --> 0:26:59.360  
Bibhuranjan Mohanty  
OK, so my objective is that how we are using angular where any any package third party package not package.

0:26:59.370 --> 0:27:10.240  
Bibhuranjan Mohanty  
I have used added in my project then I need to register if I want to use that one I need to register that project file path here OK.

0:27:12.300 --> 0:27:14.370  
Bibhuranjan Mohanty  
And you can see there are a lot of things.

0:27:29.840 --> 0:27:30.800  
Bibhuranjan Mohanty  
Now you can see.

0:27:30.920 --> 0:27:38.90  
Bibhuranjan Mohanty  
So this is one of the most important file and it contains all the configuration of your angular project.

0:27:38.460 --> 0:27:41.50  
Bibhuranjan Mohanty  
It contains the configuration such as.

0:27:41.500 --> 0:27:42.790  
Bibhuranjan Mohanty  
What is the project name?

0:27:42.920 --> 0:27:44.350  
Bibhuranjan Mohanty  
What is the root directory?

0:27:44.700 --> 0:27:49.350  
Bibhuranjan Mohanty  
As you you see SRC is the root directory.

0:27:49.500 --> 0:27:51.260  
Bibhuranjan Mohanty  
It is already mentioned here.

0:27:58.940 --> 0:28:5.520  
Bibhuranjan Mohanty  
Then all the component services directly pipes what is starting point of your angular application.

0:28:6.740 --> 0:28:8.710  
Bibhuranjan Mohanty  
What is the static part of your TypeScript?

0:28:18.220 --> 0:28:19.80  
SARFARAZ ALAM  
So hello.

0:28:8.720 --> 0:28:20.270  
Bibhuranjan Mohanty  
Everything has been configured where in the angular Jason already you know package dot Jason and but now we we just have discussed hello.

0:28:24.80 --> 0:28:24.400  
Bibhuranjan Mohanty  
Still.

0:28:20.600 --> 0:28:32.10  
SARFARAZ ALAM  
So so one thing I asked you that there is a there is a two, there is a two place of for the writing styles and and and and JS files.

0:28:32.20 --> 0:28:35.120  
SARFARAZ ALAM  
So I have to put at both place or single one place.

0:28:36.230 --> 0:28:42.0  
Bibhuranjan Mohanty  
If you you have in the both place because the bootstrap requires no.

0:28:42.370 --> 0:28:43.940  
Bibhuranjan Mohanty  
Ohh both this fine.

0:28:43.640 --> 0:28:44.110  
SARFARAZ ALAM  
You never.

0:28:44.640 --> 0:28:45.250  
SARFARAZ ALAM  
No, no.

0:28:50.110 --> 0:28:50.250  
Bibhuranjan Mohanty  
Yes.

0:28:45.260 --> 0:28:54.860  
SARFARAZ ALAM  
I'm telling that in the line about 37, there is a styles present, and if you if if you calm down, kindly Scroll down.

0:28:54.870 --> 0:28:58.300  
SARFARAZ ALAM  
There is also one place right styles.

0:28:56.440 --> 0:29:0.490  
Bibhuranjan Mohanty  
Just this is the configuration, yes no where is the state.

0:29:5.150 --> 0:29:5.490  
SARFARAZ ALAM  
Down.

0:29:7.530 --> 0:29:9.270  
Bibhuranjan Mohanty  
This is for testing configuration.

0:29:10.740 --> 0:29:11.110  
SARFARAZ ALAM  
All.

0:29:10.960 --> 0:29:11.550  
Bibhuranjan Mohanty  
Yeah, it is.

0:29:11.560 --> 0:29:13.30  
Bibhuranjan Mohanty  
It is for testing configuration.

0:29:14.650 --> 0:29:15.30  
SARFARAZ ALAM  
OK.

0:29:13.280 --> 0:29:21.520  
Bibhuranjan Mohanty  
OK, this related uh, if for testing purpose if you want so if you want to run the test.

0:29:22.410 --> 0:29:28.900  
Bibhuranjan Mohanty  
Ohh unit test then all the files associated for the unit test that you can add here, OK.

0:29:28.960 --> 0:29:29.650  
SARFARAZ ALAM  
OK.

0:29:29.700 --> 0:29:30.70  
SARFARAZ ALAM  
OK.

0:29:30.80 --> 0:29:30.540  
SARFARAZ ALAM  
But but.

0:29:31.680 --> 0:29:31.840  
Bibhuranjan Mohanty  
Yeah.

0:29:35.720 --> 0:29:42.920  
Bibhuranjan Mohanty  
So I think everybody just clear about the this is what's best configuration files.

0:29:42.980 --> 0:29:45.780  
Bibhuranjan Mohanty  
OK, now application source files.

0:29:45.790 --> 0:29:46.730  
Bibhuranjan Mohanty  
We are going to see.

0:29:47.100 --> 0:29:51.890  
Bibhuranjan Mohanty  
So this is the important folder where we are going to work.

0:29:52.40 --> 0:30:21.580  
Bibhuranjan Mohanty  
It's actually that is called SRC inside the SRC there is the you you can see inside the SRC one is app folder another one is assets folder then index dot HTML then Ben is fine style dot TS style extension is a TypeScript we're going to learn about those TypeScript OK Angular it's actually you just uh TypeScript for writing all logical stops.

0:30:23.280 --> 0:30:27.270  
Bibhuranjan Mohanty  
Now there is a CSS style dot CSS.

0:30:27.320 --> 0:30:29.770  
Bibhuranjan Mohanty  
It is used for global styling OK.

0:30:32.460 --> 0:30:33.50  
Bibhuranjan Mohanty  
Now you can see.

0:30:35.980 --> 0:30:36.860  
Bibhuranjan Mohanty  
This is up.

0:30:37.180 --> 0:30:44.30  
Bibhuranjan Mohanty  
It contains the component files in which your application logic and data defined and assets.

0:30:44.520 --> 0:30:51.690  
Bibhuranjan Mohanty  
If you see the assets, the contains images and author asset file to be copied as it when you build your application.

0:30:51.760 --> 0:30:52.0  
Bibhuranjan Mohanty  
OK.

0:30:52.900 --> 0:30:55.70  
Bibhuranjan Mohanty  
Ohh then index start SAMAL.

0:30:55.80 --> 0:31:1.980  
Bibhuranjan Mohanty  
It is the entry point where your angular application start and the main dot TS.

0:31:2.350 --> 0:31:4.850  
Bibhuranjan Mohanty  
So this is the main entry point of your application.

0:31:4.950 --> 0:31:7.580  
Bibhuranjan Mohanty  
It compiles the application with the.

0:31:8.210 --> 0:31:10.500  
Bibhuranjan Mohanty  
Angular uses 2 type of compiler.

0:31:10.510 --> 0:31:18.680  
Bibhuranjan Mohanty  
One is GC compiler just in time compiler another one is AOT compiler ahead of time compiler OK if time permits.

0:31:18.690 --> 0:31:28.310  
Bibhuranjan Mohanty  
I can discuss about this and there are tecture and there is a style dot CSS file, so these are the files.

0:31:28.460 --> 0:31:31.830  
Bibhuranjan Mohanty  
Actually we are going to deal with now.

0:31:33.860 --> 0:31:38.590  
Bibhuranjan Mohanty  
Let's come and see the details about app folder inside app folder.

0:31:38.600 --> 0:31:39.770  
Bibhuranjan Mohanty  
What is actually present?

0:31:41.260 --> 0:31:43.900  
Bibhuranjan Mohanty  
OK, now you see. Uh.

0:31:49.390 --> 0:31:50.870  
Bibhuranjan Mohanty  
The app folder is nothing.

0:31:50.880 --> 0:32:17.200  
Bibhuranjan Mohanty  
It is 1 module actually and since it is 1 module it maintains one file for maintaining that information related to that model and that model file based up DOT module dot TS OK if you click on this after module dot TS you can see it is having three part one is import and the this is called decorator.

0:32:18.360 --> 0:32:22.260  
Bibhuranjan Mohanty  
OK, this is called decorator and another one is.

0:32:24.230 --> 0:32:36.330  
Bibhuranjan Mohanty  
Export OK import means this module we'll use all the angular whatever the angular features that library you need to import here.

0:32:36.600 --> 0:32:58.890  
Bibhuranjan Mohanty  
So here the angular core library it net since it is 1 module so Ng module library it is importing from this angular core and for browser module it is importing from platform vouch linkages then uh for translating routing feature.

0:32:59.280 --> 0:33:1.360  
Bibhuranjan Mohanty  
It is importing up routing.

0:33:2.150 --> 0:33:2.600  
Bibhuranjan Mohanty  
Model.

0:33:2.820 --> 0:33:6.520  
Bibhuranjan Mohanty  
So already you here is the app routing module.

0:33:7.310 --> 0:33:13.160  
Bibhuranjan Mohanty  
So this module has been imported here and then one component has created.

0:33:13.430 --> 0:33:18.520  
Bibhuranjan Mohanty  
So already I told Angular is component based application.

0:33:18.530 --> 0:33:23.990  
Bibhuranjan Mohanty  
It deals with the different components and every component consists of four things.

0:33:24.810 --> 0:33:25.530  
Bibhuranjan Mohanty  
So one is.

0:33:28.830 --> 0:33:31.310  
Bibhuranjan Mohanty  
App component TS file OK.

0:33:33.660 --> 0:33:43.830  
Bibhuranjan Mohanty  
Then there is one app component dot SHTML file and CSS file and specific PC dot test TS file.

0:33:43.980 --> 0:33:48.10  
Bibhuranjan Mohanty  
So this is for unit testing and this is the.

0:33:48.320 --> 0:33:53.330  
Bibhuranjan Mohanty  
This is for displaying the content, so you you wait.

0:33:53.770 --> 0:33:57.960  
Bibhuranjan Mohanty  
This is called template actually, OK and this is the component.

0:33:58.10 --> 0:34:8.600  
Bibhuranjan Mohanty  
This is template and this is the CSS file for this template and this is the file which is used for unit while you are you doing the unit test of the particular component.

0:34:8.730 --> 0:34:21.70  
Bibhuranjan Mohanty  
So in Angular if I will create any component, every component consists of four files and there we are going to learn this details about that for the timing you see.

0:34:24.700 --> 0:34:32.590  
Bibhuranjan Mohanty  
I just have created our just opened this app module DOT TS all the required which has been are they here.

0:34:34.170 --> 0:34:39.20  
Bibhuranjan Mohanty  
Then you can see this is the decorator which provides metadata to your module.

0:34:39.30 --> 0:34:41.370  
Bibhuranjan Mohanty  
Actually for this module you can see.

0:34:43.630 --> 0:34:44.920  
Bibhuranjan Mohanty  
In the declaration array.

0:34:45.370 --> 0:34:49.990  
Bibhuranjan Mohanty  
This is the section whatever component I have created here.

0:34:50.0 --> 0:34:54.580  
Bibhuranjan Mohanty  
One component already created for you that is called app component that is added here.

0:34:55.410 --> 0:35:3.990  
Bibhuranjan Mohanty  
If I will create any new component then I need to declare in this section inside this app module.

0:35:4.260 --> 0:35:9.940  
Bibhuranjan Mohanty  
If I'm going to create any new model, let me create one component of my own, for example.

0:35:12.600 --> 0:35:19.40  
Bibhuranjan Mohanty  
So I can create a new component using Angular CLI command, so NZ.

0:35:20.670 --> 0:35:21.590  
Bibhuranjan Mohanty  
Siemens create.

0:35:26.10 --> 0:35:26.440  
Bibhuranjan Mohanty  
Angie.

0:35:28.870 --> 0:35:33.470  
Bibhuranjan Mohanty  
DC generic component or you can write directly.

0:35:41.820 --> 0:35:43.470  
Bibhuranjan Mohanty  
Component your component.

0:35:43.640 --> 0:35:47.920  
Bibhuranjan Mohanty  
Let let me write the component name just as home, OK.

0:35:51.270 --> 0:35:55.280  
Bibhuranjan Mohanty  
No, this this will create uh, yes, standalone component will create.

0:35:55.710 --> 0:36:1.700  
Bibhuranjan Mohanty  
You can see it is created within your folder if I will write hyphen hyphen flat then it will not create any folder.

0:36:1.780 --> 0:36:9.220  
Bibhuranjan Mohanty  
So so now you can see your component has been created, have given a default party to your app.

0:36:10.380 --> 0:36:19.430  
Bibhuranjan Mohanty  
OK, if you expire now, you can see your one component has been created within one folder and it is bundling the things.

0:36:19.700 --> 0:36:20.690  
Bibhuranjan Mohanty  
So what are the things?

0:36:20.700 --> 0:36:22.820  
Bibhuranjan Mohanty  
Are there associated with the food?

0:36:23.710 --> 0:36:31.30  
Bibhuranjan Mohanty  
What company one is home component dot CS form component dot HTML home component.

0:36:31.40 --> 0:36:33.760  
Bibhuranjan Mohanty  
This this four files are already created.

0:36:34.230 --> 0:36:52.140  
Bibhuranjan Mohanty  
Now you can see once you have created this component inside the app module then what are the things changes inside the operating your home component has been imported in the module then it is added in the declaration section.

0:36:52.490 --> 0:36:54.820  
Bibhuranjan Mohanty  
Everybody clear then?

0:36:55.120 --> 0:37:4.830  
Bibhuranjan Mohanty  
Any import, any library import you have done then that you need to write in the import array inside the Ng module decorator.

0:37:5.40 --> 0:37:18.290  
Bibhuranjan Mohanty  
So today, maybe some of you will confuse the but exactly decorator, so don't worry for that we are going to discuss details, but I'm just showing you this project structure.

0:37:19.150 --> 0:37:24.550  
Bibhuranjan Mohanty  
What is happening when you are doing something and then this is very, very important.

0:37:25.540 --> 0:37:28.300  
Bibhuranjan Mohanty  
This is gone bootstrap OK.

0:37:30.950 --> 0:37:34.600  
Bibhuranjan Mohanty  
So now you can see the when you are running your application.

0:37:35.30 --> 0:37:41.950  
Bibhuranjan Mohanty  
When you're running your application, then which component will be the first component which will load?

0:37:43.180 --> 0:37:43.560  
Bibhuranjan Mohanty  
Is it clear?

0:37:44.860 --> 0:37:55.50  
Bibhuranjan Mohanty  
So here the bootstrap means it it is the starting point which is going to all this up come on.

0:37:55.470 --> 0:38:1.230  
Bibhuranjan Mohanty  
So the first you see inside the index dot HTML what has been written.

0:38:3.110 --> 0:38:4.210  
Bibhuranjan Mohanty  
How rude.

0:38:4.690 --> 0:38:9.980  
Bibhuranjan Mohanty  
OK, so now you can see where this uproots selector is present.

0:38:10.760 --> 0:38:11.660  
Bibhuranjan Mohanty  
This is selector.

0:38:11.950 --> 0:38:14.200  
Bibhuranjan Mohanty  
OK so here this is present.

0:38:14.330 --> 0:38:20.760  
Bibhuranjan Mohanty  
Now you can see if you go to the component app component of TS.

0:38:21.90 --> 0:38:27.170  
Bibhuranjan Mohanty  
So here approved has been written OK and this is the selector.

0:38:28.330 --> 0:38:44.700  
Bibhuranjan Mohanty  
It is used inside the index dot HTML, so when in actually what is happening when you're running your application first main dot TS file is executed and then main dot TS loads which model.

0:38:46.300 --> 0:38:56.130  
Bibhuranjan Mohanty  
App module then app module dot TS file finds the bootstrap in the bootstrap.

0:38:56.140 --> 0:38:59.230  
Bibhuranjan Mohanty  
Which component is there up component?

0:38:59.480 --> 0:39:2.290  
Bibhuranjan Mohanty  
Everybody clear then in the app component.

0:39:3.250 --> 0:39:4.210  
Bibhuranjan Mohanty  
This is our company.

0:39:6.230 --> 0:39:7.980  
Bibhuranjan Mohanty  
It is apparent start loading.

0:39:8.350 --> 0:39:12.140  
Bibhuranjan Mohanty  
Is it clear so these components selector you have written?

0:39:12.150 --> 0:39:31.240  
Bibhuranjan Mohanty  
Where and no, and they start steam though when in your browser index dot HTML start loading, then he's uproot is going to book exhibit and this is representing your this template.

0:39:31.610 --> 0:39:32.640  
Bibhuranjan Mohanty  
Whatever written here?

0:39:33.60 --> 0:39:36.130  
Bibhuranjan Mohanty  
Everybody clear now what I'm doing.

0:39:36.960 --> 0:39:37.630  
Bibhuranjan Mohanty  
Ohh, just.

0:39:41.170 --> 0:39:43.290  
Bibhuranjan Mohanty  
OK, So what is a?

0:39:44.130 --> 0:39:47.210  
Bibhuranjan Mohanty  
How your angular application executes the thing?

0:39:48.440 --> 0:39:48.550  
Bibhuranjan Mohanty  
Yeah.

0:39:48.570 --> 0:39:55.240  
Bibhuranjan Mohanty  
First entry point when you're building your application or it calls which one vendor but Anning your application.

0:39:55.250 --> 0:39:59.850  
Bibhuranjan Mohanty  
It is called main dot TSV in the winter stairs.

0:39:59.860 --> 0:40:3.40  
Bibhuranjan Mohanty  
Fine, now your bootstrap module is which one.

0:40:6.150 --> 0:40:9.670  
Bibhuranjan Mohanty  
Our buddy everybody clear in the app module.

0:40:11.970 --> 0:40:13.600  
Bibhuranjan Mohanty  
Which component you have called in the bootstrap?

0:40:15.690 --> 0:40:22.240  
Bibhuranjan Mohanty  
And the module decorator Ng module decorator in at the bootstrap section you are calling our company.

0:40:22.910 --> 0:40:23.190  
Bibhuranjan Mohanty  
OK.

0:40:23.980 --> 0:40:29.400  
Bibhuranjan Mohanty  
Then in the app component, what is your selector up?

0:40:30.370 --> 0:40:30.960  
Bibhuranjan Mohanty  
Is it clear?

0:40:31.250 --> 0:40:43.630  
Bibhuranjan Mohanty  
And that uproot use where index dot testing, so normally any any project you look at so index dot HTML is the index file is the entry point.

0:40:43.920 --> 0:40:57.920  
Bibhuranjan Mohanty  
So first index file is loaded, isn't that when index file is loaded it is going to call which component approved component app root component details are present where here so this this is the way.

0:40:59.830 --> 0:41:1.210  
Bibhuranjan Mohanty  
OK, now what I'm doing.

0:41:3.220 --> 0:41:9.680  
Bibhuranjan Mohanty  
I'm removing all these predefined content inside the app component dot HTML.

0:41:10.870 --> 0:41:14.970  
Bibhuranjan Mohanty  
OK, now here I'm writing my own contract.

0:41:16.900 --> 0:41:17.890  
Bibhuranjan Mohanty  
I'm simple writing.

0:41:17.940 --> 0:41:20.400  
Bibhuranjan Mohanty  
Welcome to so.

0:41:20.410 --> 0:41:20.550  
Bibhuranjan Mohanty  
Yeah.

0:41:20.560 --> 0:41:21.450  
Bibhuranjan Mohanty  
Something like this.

0:41:23.50 --> 0:41:25.530  
Bibhuranjan Mohanty  
So let's run this application whatever.

0:41:27.600 --> 0:41:31.20  
Bibhuranjan Mohanty  
Really, application, yes.

0:41:33.220 --> 0:41:35.770  
Bibhuranjan Mohanty  
It is swing your data.

0:41:36.260 --> 0:41:37.700  
Bibhuranjan Mohanty  
Now what you will do?

0:41:42.990 --> 0:41:49.820  
Bibhuranjan Mohanty  
Here you can able to see the title what is written here Angie Demo.

0:41:50.600 --> 0:41:51.660  
Bibhuranjan Mohanty  
I want to go.

0:41:53.310 --> 0:41:56.140  
Bibhuranjan Mohanty  
Display this title also in this.

0:42:1.370 --> 0:42:1.690  
Bibhuranjan Mohanty  
Died.

0:42:9.120 --> 0:42:9.300  
Bibhuranjan Mohanty  
Right.

0:42:14.480 --> 0:42:18.170  
Bibhuranjan Mohanty  
This is called interpolation and this is the data binding mechanism.

0:42:20.240 --> 0:42:25.170  
Bibhuranjan Mohanty  
I'm writing title so you can see title is displaying.

0:42:27.40 --> 0:42:28.810  
Bibhuranjan Mohanty  
Don't let me change.

0:42:37.460 --> 0:42:42.980  
Bibhuranjan Mohanty  
Is the opponent so now so you you are changing.

0:42:44.340 --> 0:42:53.530  
Bibhuranjan Mohanty  
Well, in the app component dot TS file then it is reflecting where in this STM OK.

0:42:57.700 --> 0:43:6.360  
Bibhuranjan Mohanty  
So I think everybody, uh, got overall idea regarding the project structure then they're doing here.

0:43:10.150 --> 0:43:17.970  
Bibhuranjan Mohanty  
So I am going to create number of components and all component will present where in the our component.

0:43:18.490 --> 0:43:25.300  
Bibhuranjan Mohanty  
OK, this now the app component will be the parent component and all other components will be the child.

0:43:26.180 --> 0:43:32.120  
Bibhuranjan Mohanty  
OK, so suppose I want to show the content of the home component.

0:43:32.340 --> 0:43:33.90  
Bibhuranjan Mohanty  
So now you can see.

0:43:35.280 --> 0:43:39.430  
Bibhuranjan Mohanty  
If I will create a click on the home component Dot TS file.

0:43:39.910 --> 0:43:47.350  
Bibhuranjan Mohanty  
Now every component having also three part one is import, second one is decorator.

0:43:47.780 --> 0:43:55.50  
Bibhuranjan Mohanty  
So here you can see since it is 1 component and this component is decorated by Arthur rate component decorator.

0:43:55.450 --> 0:43:56.30  
Bibhuranjan Mohanty  
OK.

0:43:56.100 --> 0:43:58.650  
Bibhuranjan Mohanty  
And these component decorator contains 3 things.

0:43:58.760 --> 0:43:59.630  
Bibhuranjan Mohanty  
One is selector.

0:44:0.570 --> 0:44:2.670  
Bibhuranjan Mohanty  
Then what will be the template?

0:44:3.790 --> 0:44:14.850  
Bibhuranjan Mohanty  
You can write your file or you can directly write template HTML code here and then what will be the CS associated to this component?

0:44:15.780 --> 0:44:17.480  
Bibhuranjan Mohanty  
OK, so you can use here.

0:44:19.630 --> 0:44:36.480  
Bibhuranjan Mohanty  
And now you can see in the home component it is showing home works and what is the selector if you want to see use this component then what will be your selector up or let me use this one this selector where.

0:44:38.540 --> 0:44:40.830  
Bibhuranjan Mohanty  
In the app component or S team.

0:44:41.180 --> 0:44:44.70  
Bibhuranjan Mohanty  
So here what I'm doing.

0:44:48.180 --> 0:44:48.890  
Bibhuranjan Mohanty  
Optical.

0:44:49.50 --> 0:44:50.80  
Bibhuranjan Mohanty  
Simple imputing.

0:44:50.790 --> 0:44:55.750  
Bibhuranjan Mohanty  
So now you can see homeworks OK like this.

0:44:55.800 --> 0:44:59.70  
Bibhuranjan Mohanty  
Any number of component you just create approach.

0:44:59.600 --> 0:45:16.0  
Bibhuranjan Mohanty  
I will create another component like so here you may write Ng generate component or you can use the short form like Ng then see let me create another component like about.

0:45:23.530 --> 0:45:46.680  
Bibhuranjan Mohanty  
So now about component also created once you create this component or and this component has been registered in will in the app module TS you can see in the app module TS it is automatically import it and it is added in the declaration because you have declared this component everybody here.

0:45:50.510 --> 0:45:50.720  
Amit Kumar Mittal  
The.

0:45:49.900 --> 0:45:52.510  
Bibhuranjan Mohanty  
So I have created a another component.

0:45:54.160 --> 0:45:54.340  
Amit Kumar Mittal  
Hello.

0:45:52.620 --> 0:45:55.700  
Bibhuranjan Mohanty  
This is you can see here hello.

0:45:56.540 --> 0:46:0.630  
Amit Kumar Mittal  
Set of I have one question, Sir, regarding Sir hearing selector.

0:46:0.700 --> 0:46:7.290  
Amit Kumar Mittal  
There is a app, home is returned and you have to link with in HTML as well.

0:46:7.300 --> 0:46:11.700  
Amit Kumar Mittal  
So we can give any name here according to our need in selector.

0:46:10.720 --> 0:46:12.80  
Bibhuranjan Mohanty  
Yes, yes, yes.

0:46:13.100 --> 0:46:15.800  
Bibhuranjan Mohanty  
Let let me density.

0:46:17.450 --> 0:46:18.480  
Bibhuranjan Mohanty  
Let me write everything.

0:46:20.910 --> 0:46:21.230  
Amit Kumar Mittal  
OK.

0:46:21.190 --> 0:46:30.500  
Bibhuranjan Mohanty  
OK, so now I'm going to use this one where in the in its parent component that is called optimal.

0:46:32.260 --> 0:46:35.560  
Bibhuranjan Mohanty  
Yet is simple right tables then?

0:46:35.400 --> 0:46:35.730  
Amit Kumar Mittal  
OK.

0:46:35.740 --> 0:46:37.50  
Amit Kumar Mittal  
OK, OK.

0:46:37.760 --> 0:46:38.160  
Bibhuranjan Mohanty  
Now we can.

0:46:37.60 --> 0:46:44.930  
Amit Kumar Mittal  
And one thing also said but but for example suppose in one component we can use that component in other component as well.

0:46:44.940 --> 0:46:45.860  
Amit Kumar Mittal  
By using this selector.

0:46:47.360 --> 0:46:47.480  
Bibhuranjan Mohanty  
Yes.

0:46:48.390 --> 0:46:48.780  
Amit Kumar Mittal  
OK.

0:46:48.990 --> 0:46:51.570  
Amit Kumar Mittal  
OK, OK, got it.

0:46:52.600 --> 0:46:52.940  
Amit Kumar Mittal  
You know.

0:46:52.930 --> 0:46:53.230  
Bibhuranjan Mohanty  
OK.

0:46:56.590 --> 0:46:59.570  
Bibhuranjan Mohanty  
Well, I think everybody clear up to this.

0:47:3.210 --> 0:47:8.710  
SARFARAZ ALAM  
It's so, Sir, what will happen if I put selected in index dot HTML?

0:47:8.980 --> 0:47:9.870  
Bibhuranjan Mohanty  
That's the deal.

0:47:9.880 --> 0:47:11.80  
Bibhuranjan Mohanty  
Good. Hello.

0:47:13.270 --> 0:47:13.680  
Bibhuranjan Mohanty  
Yeah, hello.

0:47:13.550 --> 0:47:14.60  
SARFARAZ ALAM  
Hello.

0:47:14.890 --> 0:47:22.230  
SARFARAZ ALAM  
Yes, Sir, I am asking that what will happen if I put a app home selected in in desktop testing.

0:47:25.0 --> 0:47:25.120  
Bibhuranjan Mohanty  
Yes.

0:47:26.550 --> 0:47:31.290  
Bibhuranjan Mohanty  
Then it just you see here and that then you let.

0:47:33.420 --> 0:47:37.490  
Bibhuranjan Mohanty  
Need to write this component home component.

0:47:37.820 --> 0:47:40.380  
Bibhuranjan Mohanty  
Just let me remove this one from here.

0:47:41.260 --> 0:47:42.500  
Bibhuranjan Mohanty  
Now you can see something.

0:47:47.510 --> 0:47:49.710  
Bibhuranjan Mohanty  
Here in the bootstrap OK.

0:47:55.540 --> 0:47:59.820  
Bibhuranjan Mohanty  
Go to there in the bootstrap you need to change this one.

0:48:5.370 --> 0:48:6.320  
Bibhuranjan Mohanty  
Then what will happen?

0:48:9.50 --> 0:48:9.310  
SARFARAZ ALAM  
Umm.

0:48:6.390 --> 0:48:13.840  
Bibhuranjan Mohanty  
Your entry but post loading module will be a component will be complete.

0:48:14.150 --> 0:48:14.690  
SARFARAZ ALAM  
Phone number.

0:48:15.680 --> 0:48:16.60  
Bibhuranjan Mohanty  
But it.

0:48:17.0 --> 0:48:17.380  
SARFARAZ ALAM  
Yes, yes.

0:48:19.430 --> 0:48:21.570  
Bibhuranjan Mohanty  
So you need to change in the bootstrap part.

0:48:24.950 --> 0:48:25.150  
Bibhuranjan Mohanty  
It's.

0:48:24.540 --> 0:48:28.40  
SARFARAZ ALAM  
But ideally we don't have we we don't need to change that.

0:48:27.640 --> 0:48:28.210  
Bibhuranjan Mohanty  
No, no.

0:48:28.420 --> 0:48:30.300  
Bibhuranjan Mohanty  
Yes, it is not required.

0:48:30.620 --> 0:48:34.450  
Bibhuranjan Mohanty  
So your app as per the standard apps should be the entry point.

0:48:36.600 --> 0:48:41.590  
Bibhuranjan Mohanty  
You we don't, uh, deport, deport to any modification to the index file.

0:48:42.50 --> 0:48:46.960  
Bibhuranjan Mohanty  
So whatever things we will do, we we will do inside this module, OK.

0:48:49.190 --> 0:48:52.420  
Bibhuranjan Mohanty  
So now you just like this one.

0:48:55.490 --> 0:48:56.730  
Bibhuranjan Mohanty  
But we can change it.

0:49:2.410 --> 0:49:5.920  
Bibhuranjan Mohanty  
So ohh, now you can see this.

0:49:7.300 --> 0:49:10.330  
Bibhuranjan Mohanty  
These are the files I have written, some theory you just.

0:49:10.380 --> 0:49:12.420  
Bibhuranjan Mohanty  
I will save this file and just go through this.

0:49:13.340 --> 0:49:15.690  
Bibhuranjan Mohanty  
Ohh already I have explained this one.

0:49:15.800 --> 0:49:25.500  
Bibhuranjan Mohanty  
The component then import statement, then component class is the component class, then arthritic component decorator.

0:49:26.810 --> 0:49:30.290  
Bibhuranjan Mohanty  
Then we are using template URL style URL in the component.

0:49:31.200 --> 0:49:32.40  
Bibhuranjan Mohanty  
OK selector.

0:49:34.210 --> 0:49:37.980  
Bibhuranjan Mohanty  
Well, so I I will discuss details about the component.

0:49:38.380 --> 0:49:40.130  
Bibhuranjan Mohanty  
Ohh, and our subsequent class.

0:49:40.140 --> 0:49:53.210  
Bibhuranjan Mohanty  
So I today we have just swing seeing the over overview of everything, then a root module, then these other things already have explained.

0:49:53.990 --> 0:49:58.630  
Bibhuranjan Mohanty  
Then declaring soon they'll come components you which you have created.

0:49:58.730 --> 0:50:0.510  
Bibhuranjan Mohanty  
You need to add in the declaration section.

0:50:1.300 --> 0:50:11.160  
Bibhuranjan Mohanty  
Then any services you are creating uh in angular, we are going to create any different kind of services that need to be added into provider then bootstrap.

0:50:11.640 --> 0:50:14.320  
Bibhuranjan Mohanty  
Ohh in the in this module.

0:50:14.710 --> 0:50:15.470  
Bibhuranjan Mohanty  
Which file?

0:50:15.630 --> 0:50:20.170  
Bibhuranjan Mohanty  
Which component will be the starting component that you need to add in the module?

0:50:20.950 --> 0:50:21.900  
Bibhuranjan Mohanty  
OK, module.

0:50:21.910 --> 0:50:27.240  
Bibhuranjan Mohanty  
Uh, it's just like a package in Java or namespace in C sharp.

0:50:27.300 --> 0:50:39.160  
Bibhuranjan Mohanty  
So here also same means we are grouping the things grouping the set of components and it's associated things within one logical container that is called modular. OK.

0:50:43.560 --> 0:50:45.660  
Bibhuranjan Mohanty  
This is aprotic model.

0:50:48.70 --> 0:50:49.320  
Bibhuranjan Mohanty  
This bootstrapping already.

0:50:49.330 --> 0:50:54.790  
Bibhuranjan Mohanty  
I have told bootstrapping which what is bootstrapping, then this is the index dot HTML.

0:50:55.800 --> 0:50:58.510  
Bibhuranjan Mohanty  
So these things uh, I already have discussed.

0:51:1.270 --> 0:51:3.390  
Bibhuranjan Mohanty  
Ohh everybody got some idea?

0:51:5.320 --> 0:51:8.590  
Bibhuranjan Mohanty  
About the project structure hello.

0:51:13.540 --> 0:51:13.900  
Amit Kumar Mittal  
Yes, Sir.

0:51:14.290 --> 0:51:14.810  
Sonali Jena  
Yes, yes.

0:51:16.40 --> 0:51:16.260  
SARFARAZ ALAM  
Yes.

0:51:14.690 --> 0:51:16.400  
Amit Kumar Mittal  
Uh, there's one more thing.

0:51:16.100 --> 0:51:16.400  
Bibhuranjan Mohanty  
Open.

0:51:18.300 --> 0:51:18.480  
Bibhuranjan Mohanty  
Yeah.

0:51:16.410 --> 0:51:23.350  
Amit Kumar Mittal  
I just want to clear Sir in session you have to use two types of commands that are start with NPM RNG.

0:51:23.390 --> 0:51:26.550  
Amit Kumar Mittal  
So may I know, Sir, what is the difference between these two types of comments, Sir?

0:51:26.900 --> 0:51:27.350  
Bibhuranjan Mohanty  
Yes.

0:51:28.330 --> 0:51:28.580  
Amit Kumar Mittal  
Here.

0:51:27.700 --> 0:51:32.970  
Bibhuranjan Mohanty  
Ohhh Andy is exclusively related to the angular framework.

0:51:34.120 --> 0:51:42.940  
Bibhuranjan Mohanty  
OK, so then this CLI command we are using for creating just you you have seen here for creating a component.

0:51:44.60 --> 0:51:53.720  
Bibhuranjan Mohanty  
Thanks for getting always for creating interfaces for creating a different features which is exclusively and associated with the angular.

0:51:54.170 --> 0:51:54.790  
Bibhuranjan Mohanty  
Is it clear?

0:51:55.340 --> 0:52:3.260  
Bibhuranjan Mohanty  
But Angular you you just sub so many third party library just like just recently I have used bootstrap.

0:52:4.620 --> 0:52:5.940  
Bibhuranjan Mohanty  
OK. Hello.

0:52:5.920 --> 0:52:7.160  
Amit Kumar Mittal  
It yes it is.

0:52:7.140 --> 0:52:27.40  
Bibhuranjan Mohanty  
So so bootstrap is not belongs to the angular things, it is belongs to the no OK that's why it is added in the node package because the angular build upon the node and moment and since angular is a framework, it also contains its own features.

0:52:28.180 --> 0:52:37.480  
Bibhuranjan Mohanty  
So Angular uses node packages node library details as well as it is also using its own things.

0:52:39.10 --> 0:52:39.370  
Amit Kumar Mittal  
OK.

0:52:38.680 --> 0:52:45.990  
Bibhuranjan Mohanty  
So ohh, when you're dealing with the angular framework exclusively, angular framework related things, then you just use entry.

0:52:46.0 --> 0:52:46.350  
Bibhuranjan Mohanty  
Come on.

0:52:46.800 --> 0:52:57.370  
Bibhuranjan Mohanty  
And when you are going to use any third party external library which is exclusively related to the node, then you need you use NPM.

0:52:57.380 --> 0:52:58.650  
Bibhuranjan Mohanty  
Node is it clear?

0:52:59.200 --> 0:52:59.670  
Amit Kumar Mittal  
Yes, Sir.

0:52:59.680 --> 0:53:1.330  
Amit Kumar Mittal  
Yes, Sir. Focus.

0:53:2.590 --> 0:53:3.10  
Bibhuranjan Mohanty  
OK.

0:53:3.50 --> 0:53:3.860  
Bibhuranjan Mohanty  
Just like this.

0:53:3.930 --> 0:53:14.40  
Bibhuranjan Mohanty  
Uh here I have used to bootstrap again Angular also providing 1 bootstrap library that is called Ng Bootstrap Angular bootstrap.

0:53:14.130 --> 0:53:14.890  
Bibhuranjan Mohanty  
You can see it there.

0:53:20.410 --> 0:53:23.240  
Amit Kumar Mittal  
Angular angular material is the same.

0:53:23.700 --> 0:53:25.300  
Amit Kumar Mittal  
Uh, OK.

0:53:32.270 --> 0:53:32.470  
Amit Kumar Mittal  
OK.

0:53:32.480 --> 0:53:34.130  
Amit Kumar Mittal  
OK. OK.

0:53:23.900 --> 0:53:36.850  
Bibhuranjan Mohanty  
Yes, yes, angular material then if you want to install angular material then through engine command you need to install and it appears now you can see this is a angular bootstrap.

0:53:51.0 --> 0:53:51.420  
Amit Kumar Mittal  
Yes, Sir.

0:53:37.340 --> 0:53:56.400  
Bibhuranjan Mohanty  
Then if you want to add these bootstrap it then you you need to use Ng then it is going it is not going to add where in your load module is it clear and its registration will be down in the angular dot Jason file.

0:53:58.540 --> 0:53:58.820  
Bibhuranjan Mohanty  
OK.

0:54:0.80 --> 0:54:1.80  
Amit Kumar Mittal  
OK, got it.

0:54:6.490 --> 0:54:6.710  
Bibhuranjan Mohanty  
OK.

0:54:9.330 --> 0:54:12.480  
Bibhuranjan Mohanty  
So one thing I I want to show you here.

0:54:19.720 --> 0:54:22.540  
Bibhuranjan Mohanty  
Angular dot Jason yes.

0:54:38.780 --> 0:54:38.920  
Bibhuranjan Mohanty  
Yeah.

0:54:41.780 --> 0:54:42.50  
Bibhuranjan Mohanty  
Yeah.

0:54:42.60 --> 0:54:42.140  
Bibhuranjan Mohanty  
Yeah.

0:54:43.790 --> 0:54:44.980  
Bibhuranjan Mohanty  
And seeing it up, OK.

0:54:45.500 --> 0:54:45.990  
Bibhuranjan Mohanty  
Yeah.

0:54:46.520 --> 0:54:46.770  
Bibhuranjan Mohanty  
Yeah.

0:54:47.300 --> 0:54:48.880  
Bibhuranjan Mohanty  
So have you put this comma?

0:54:54.360 --> 0:54:54.690  
Bibhuranjan Mohanty  
Is this?

0:55:6.200 --> 0:55:7.80  
Bibhuranjan Mohanty  
He uh.

0:55:7.90 --> 0:55:11.10  
Bibhuranjan Mohanty  
There is one module that is called APRA module.

0:55:11.20 --> 0:55:12.890  
Bibhuranjan Mohanty  
Through this we can create the routes.

0:55:13.810 --> 0:55:18.330  
Bibhuranjan Mohanty  
It for example uh, but the.

0:55:22.670 --> 0:55:23.60  
Bibhuranjan Mohanty  
Me.

0:55:23.190 --> 0:55:25.120  
Bibhuranjan Mohanty  
Yeah, it's something like this.

0:56:42.940 --> 0:56:43.850  
Bibhuranjan Mohanty  
So we don't know that.

0:56:46.430 --> 0:56:46.930  
Bibhuranjan Mohanty  
The difference?

0:56:57.80 --> 0:56:57.260  
Bibhuranjan Mohanty  
The.

0:57:9.590 --> 0:57:12.150  
Bibhuranjan Mohanty  
But let me remove all these things.

0:58:13.560 --> 0:58:13.890  
Bibhuranjan Mohanty  
You don't.

0:58:49.150 --> 0:58:49.590  
Bibhuranjan Mohanty  
Sure.

0:59:9.780 --> 0:59:9.880  
Bibhuranjan Mohanty  
No.

0:59:12.950 --> 0:59:16.360  
Bibhuranjan Mohanty  
OK, so why I'm doing this one?

0:59:16.410 --> 0:59:17.480  
Bibhuranjan Mohanty  
Uh, let me uh.

0:59:21.150 --> 0:59:28.300  
Bibhuranjan Mohanty  
Explain you what I have done here, because I'm going to give you one assignment that you are going to create one website.

0:59:28.730 --> 0:59:29.360  
Bibhuranjan Mohanty  
It is.

0:59:29.550 --> 0:59:46.150  
Bibhuranjan Mohanty  
It will having a home page about a space and one service space and contactor space OK and four page will be 4 component 4 page will be 4 component and you will use bootstrap for designing the page.

0:59:46.520 --> 0:59:48.970  
Bibhuranjan Mohanty  
Everybody clear this will be the assignment for you.

0:59:49.300 --> 0:59:52.270  
Bibhuranjan Mohanty  
So that's why I'm explaining this one.

0:59:52.280 --> 1:0:0.310  
Bibhuranjan Mohanty  
What I have done I just have use app routing module for defining my route without routing.

1:0:0.320 --> 1:0:2.790  
Bibhuranjan Mohanty  
I cannot create such kind of navigation.

1:0:3.160 --> 1:0:16.510  
Bibhuranjan Mohanty  
So when I click on the home, what it is doing homeworks when I clicking on the about it is saying about works OK so I can use bootstrap just a minute.

1:0:19.90 --> 1:0:20.50  
Bibhuranjan Mohanty  
Which step five?

1:0:20.100 --> 1:0:22.760  
Bibhuranjan Mohanty  
You just go there and you can also use this one.

1:0:23.620 --> 1:0:27.240  
Bibhuranjan Mohanty  
OK, so there are components.

1:0:29.20 --> 1:0:33.280  
Bibhuranjan Mohanty  
For example, there is an upper I want to use it in the.

1:0:33.650 --> 1:0:34.920  
Bibhuranjan Mohanty  
Let me remove everything.

1:0:37.860 --> 1:0:38.160  
Bibhuranjan Mohanty  
Here.

1:0:41.550 --> 1:0:43.680  
Bibhuranjan Mohanty  
So what is the use of a router outlet?

1:0:43.690 --> 1:0:45.420  
Bibhuranjan Mohanty  
I'm just going to explain you.

1:0:45.850 --> 1:0:49.750  
Bibhuranjan Mohanty  
Ohh, just wait, let me create one navigation bar first.

1:0:54.320 --> 1:0:56.160  
Bibhuranjan Mohanty  
Any anyone I can take from here?

1:0:57.950 --> 1:0:58.420  
Bibhuranjan Mohanty  
Select.

1:0:58.430 --> 1:0:59.540  
Bibhuranjan Mohanty  
This is the simple one.

1:1:0.270 --> 1:1:5.590  
Bibhuranjan Mohanty  
What I'm doing I just copy this code and paste it in the app component dot HTML.

1:1:7.70 --> 1:1:7.740  
Bibhuranjan Mohanty  
Just save it.

1:1:7.750 --> 1:1:8.420  
Bibhuranjan Mohanty  
Now you can see.

1:1:12.830 --> 1:1:13.510  
Bibhuranjan Mohanty  
What's the job?

1:1:31.250 --> 1:1:32.390  
Bibhuranjan Mohanty  
Stop, that tickles.

1:1:32.400 --> 1:1:33.860  
Bibhuranjan Mohanty  
Stop photos.

1:1:46.250 --> 1:1:46.560  
Bibhuranjan Mohanty  
It.

1:1:46.610 --> 1:1:47.940  
Bibhuranjan Mohanty  
Uh, we'll see that.

1:1:48.10 --> 1:1:52.0  
Bibhuranjan Mohanty  
Maybe this bootstrap path is not correct, that's why it is not showing.

1:1:52.450 --> 1:1:54.310  
Bibhuranjan Mohanty  
Anyway, just look at here.

1:2:3.850 --> 1:2:13.370  
Bibhuranjan Mohanty  
You just uh, we will create some snapping action like this and this is warm and where the home instead of HRTF.

1:2:13.830 --> 1:2:16.100  
Bibhuranjan Mohanty  
Here I will write router link.

1:2:19.240 --> 1:2:22.470  
Bibhuranjan Mohanty  
And here I will write but.

1:2:24.970 --> 1:2:26.530  
Bibhuranjan Mohanty  
They're like it about.

1:2:29.150 --> 1:2:29.520  
Bibhuranjan Mohanty  
It won't.

1:2:30.840 --> 1:2:32.900  
Bibhuranjan Mohanty  
I'm here if.

1:2:35.610 --> 1:2:35.790  
Bibhuranjan Mohanty  
Like.

1:2:42.730 --> 1:2:45.470  
Bibhuranjan Mohanty  
OK, let's remove off.

1:2:46.270 --> 1:2:46.640  
Bibhuranjan Mohanty  
Yes.

1:2:46.650 --> 1:2:48.360  
Bibhuranjan Mohanty  
Any other feature you can add here.

1:2:49.150 --> 1:3:10.730  
Bibhuranjan Mohanty  
So for the timing users see this is, uh, the number I have used and inside just below to it I have used which one router out it and this router outlet will facilitate their dynamically any component you want to show that will display in this lecture OK for example I'm clicking on home it is swing.

1:3:10.780 --> 1:3:11.730  
Bibhuranjan Mohanty  
Home works.

1:3:12.0 --> 1:3:15.970  
Bibhuranjan Mohanty  
So you just do changes?

1:3:16.240 --> 1:3:19.570  
Bibhuranjan Mohanty  
Uh, that would change the whole it's like.

1:3:24.280 --> 1:3:25.580  
Bibhuranjan Mohanty  
You can create one days.

1:3:29.420 --> 1:3:30.870  
Bibhuranjan Mohanty  
Said thirty people just right.

1:3:39.850 --> 1:3:49.730  
Bibhuranjan Mohanty  
This is home component and if you want to put some style you can use inline style also or the boards and biting.

1:3:52.320 --> 1:3:53.40  
Bibhuranjan Mohanty  
And right.

1:3:55.520 --> 1:3:56.130  
Bibhuranjan Mohanty  
Let me so.

1:3:59.660 --> 1:4:3.40  
Bibhuranjan Mohanty  
We learnt you can get it soon.

1:4:11.610 --> 1:4:11.980  
Bibhuranjan Mohanty  
Order.

1:4:23.900 --> 1:4:29.920  
Bibhuranjan Mohanty  
So now we can see the home company is displaying just like this and same if I I will use in the.

1:4:40.700 --> 1:4:42.290  
Bibhuranjan Mohanty  
You just write about component.

1:4:43.690 --> 1:4:46.100  
Bibhuranjan Mohanty  
You click this is swing, the work company.

1:4:46.490 --> 1:4:53.120  
Bibhuranjan Mohanty  
OK, So what is our my requirement for your assignment using bootstrap.

1:4:53.570 --> 1:5:1.940  
Bibhuranjan Mohanty  
You create one now bar where home, about services, contact will be you.

1:5:1.950 --> 1:5:9.160  
Bibhuranjan Mohanty  
You need to write then when you click on the home it is going to load the component that is called home.

1:5:9.250 --> 1:5:12.450  
Bibhuranjan Mohanty  
Your number will remain fixed just under it.

1:5:12.670 --> 1:5:18.800  
Bibhuranjan Mohanty  
Your home component is going display when you click on the about it is going to display the about component.

1:5:18.850 --> 1:5:21.550  
Bibhuranjan Mohanty  
OK, so how I have done this?

1:5:21.560 --> 1:5:26.720  
Bibhuranjan Mohanty  
This is the when I click on this this respective component is loading.

1:5:27.80 --> 1:5:31.930  
Bibhuranjan Mohanty  
Here I have done what the router configuration I have done.

1:5:32.0 --> 1:5:33.90  
Bibhuranjan Mohanty  
So how I have done?

1:5:33.160 --> 1:5:37.920  
Bibhuranjan Mohanty  
Just try to understand so everybody clear how to create components.

1:5:39.170 --> 1:5:39.290  
Bibhuranjan Mohanty  
Yes.

1:5:40.600 --> 1:5:47.170  
Bibhuranjan Mohanty  
Now in your project you will get one file that is called routing module dot TSV.

1:5:50.150 --> 1:5:50.880  
Bibhuranjan Mohanty  
OK.

1:5:51.510 --> 1:5:58.690  
Bibhuranjan Mohanty  
In the routing dot PS file, whatever component you have created, you just add this yes.

1:6:0.690 --> 1:6:4.300  
Bibhuranjan Mohanty  
Just you write import and you give any name.

1:6:5.470 --> 1:6:10.90  
Bibhuranjan Mohanty  
What do you reference component name then from where you just?

1:6:11.960 --> 1:6:16.410  
Bibhuranjan Mohanty  
Vincent, the physical part of this one, so be S4 is having its intelligence.

1:6:16.420 --> 1:6:22.810  
Bibhuranjan Mohanty  
It will get once you write up component then it will get no physical part of the respective company.

1:6:23.240 --> 1:6:40.240  
Bibhuranjan Mohanty  
So once you are getting all these things then here in the routes actually there is a chapter actually Khora to discuss related to the routing for the timing to accomplish this only task you just understand this.

1:6:40.470 --> 1:6:50.790  
Bibhuranjan Mohanty  
So in this out what I have done, this is the default page which this part if you're writing then our property is going to load.

1:6:53.80 --> 1:6:58.310  
Bibhuranjan Mohanty  
And if you are, this is though you are in a name link name.

1:6:58.350 --> 1:7:2.560  
Bibhuranjan Mohanty  
What you you want when you are writing home so you can see here.

1:7:11.560 --> 1:7:18.790  
Bibhuranjan Mohanty  
Yes, in the app component dot HTML what I have done since I have configured the.

1:7:23.520 --> 1:7:26.820  
Bibhuranjan Mohanty  
Since I have configured this path routing route path.

1:7:28.920 --> 1:7:52.520  
Bibhuranjan Mohanty  
I can huge that link so there I have written about and if and here the outer link dynamically creating link in anchor tech you just use that instead of HF you just write out router link and here you write which component is going to load.

1:7:52.570 --> 1:7:55.250  
Bibhuranjan Mohanty  
If you're clicking on about so here, you can see.

1:7:57.730 --> 1:8:4.240  
Bibhuranjan Mohanty  
If I will click on the about it is going to load which component about similarly.

1:8:9.630 --> 1:8:10.980  
Bibhuranjan Mohanty  
Here I have written home.

1:8:11.60 --> 1:8:18.0  
Bibhuranjan Mohanty  
When I click on the home it is going the IT is going to call the router module inside the router module it will map with the home.

1:8:18.310 --> 1:8:22.240  
Bibhuranjan Mohanty  
Then home is mapped with the home component.

1:8:22.310 --> 1:8:24.540  
Bibhuranjan Mohanty  
Now it is going to load the home component.

1:8:25.70 --> 1:8:28.730  
Bibhuranjan Mohanty  
So can anybody having any doubt here?

1:8:32.960 --> 1:8:33.170  
Bibhuranjan Mohanty  
Hello.

1:8:37.970 --> 1:8:38.320  
Amit Kumar Mittal  
He is.

1:8:42.80 --> 1:8:42.530  
Bibhuranjan Mohanty  
OK.

1:8:43.40 --> 1:8:49.920  
Bibhuranjan Mohanty  
So one thing we need to see, the bootstrap path instinct.

1:8:58.420 --> 1:8:58.890  
Bibhuranjan Mohanty  
Super.

1:8:59.140 --> 1:8:59.800  
Bibhuranjan Mohanty  
What did I?

1:9:2.530 --> 1:9:4.140  
Bibhuranjan Mohanty  
Let me show you that.

1:9:4.400 --> 1:9:4.680  
Bibhuranjan Mohanty  
What?

1:9:5.160 --> 1:9:6.360  
Bibhuranjan Mohanty  
What is the exact path?

1:9:9.880 --> 1:9:11.70  
Bibhuranjan Mohanty  
OK, what models?

1:9:14.320 --> 1:9:15.410  
Bibhuranjan Mohanty  
This stop it.

1:9:17.150 --> 1:9:17.940  
Bibhuranjan Mohanty  
Yes, this week.

1:9:29.620 --> 1:9:31.180  
Bibhuranjan Mohanty  
Let's say forgot to mention the note.

1:9:54.470 --> 1:9:55.680  
Bibhuranjan Mohanty  
You need to smoke a few.

1:10:9.650 --> 1:10:10.360  
Bibhuranjan Mohanty  
Sort of work.

1:10:10.370 --> 1:10:11.440  
Bibhuranjan Mohanty  
Right, it's not working.

1:10:40.500 --> 1:10:40.740  
Bibhuranjan Mohanty  
Yeah.

1:10:54.600 --> 1:10:55.460  
Bibhuranjan Mohanty  
This was OK.

1:11:9.960 --> 1:11:12.270  
Bibhuranjan Mohanty  
Well then test. OK.

1:11:13.780 --> 1:11:14.230  
Bibhuranjan Mohanty  
Yes, yes.

1:11:23.600 --> 1:11:25.860  
Bibhuranjan Mohanty  
I've got to do this but it.

1:11:43.280 --> 1:11:46.70  
Bibhuranjan Mohanty  
So I will see that why it is not working.

1:11:46.240 --> 1:11:46.900  
Bibhuranjan Mohanty  
It should work.

1:11:48.690 --> 1:11:50.50  
Bibhuranjan Mohanty  
Tools like umm.

1:11:53.550 --> 1:11:56.140  
Bibhuranjan Mohanty  
Umm, thank goodness this thing.

1:11:52.720 --> 1:11:56.290  
Avinash Kumar  
13 uh, where are you giving the path?

1:11:56.520 --> 1:12:2.660  
Avinash Kumar  
There will be no engine module and for giving the IT.

1:12:1.660 --> 1:12:4.0  
Bibhuranjan Mohanty  
With, with and that it's.

1:12:7.640 --> 1:12:9.490  
Avinash Kumar  
Answer yes.

1:12:9.500 --> 1:12:9.800  
Avinash Kumar  
Yes Sir.

1:12:6.490 --> 1:12:11.820  
Bibhuranjan Mohanty  
Mr Yeah, it's yeah.

1:12:12.490 --> 1:12:13.880  
Bibhuranjan Mohanty  
This is the path that you know.

1:12:13.890 --> 1:12:14.90  
Bibhuranjan Mohanty  
Yeah.

1:12:14.500 --> 1:12:15.130  
Bibhuranjan Mohanty  
But the one more.

1:12:14.650 --> 1:12:17.780  
Avinash Kumar  
Yes, yes, but there is no need to mention Angie modules.

1:12:20.530 --> 1:12:21.990  
Bibhuranjan Mohanty  
And node modules.

1:12:19.120 --> 1:12:23.100  
Avinash Kumar  
Answer for getting a chewer path we can yes yes.

1:12:28.360 --> 1:12:28.730  
Bibhuranjan Mohanty  
Yes.

1:12:28.760 --> 1:12:34.910  
Bibhuranjan Mohanty  
Node bottle it if we mince son, then it will not problem actually.

1:12:37.890 --> 1:12:38.460  
Avinash Kumar  
OK Sir.

1:12:38.470 --> 1:12:46.340  
Avinash Kumar  
But I have used to eat without mentioning and it is running successfully in my my PC.

1:12:45.720 --> 1:12:50.300  
Bibhuranjan Mohanty  
This so this this is here part problem.

1:12:50.310 --> 1:12:55.0  
Bibhuranjan Mohanty  
Actually, if you remove when it is not working.

1:12:53.660 --> 1:12:55.350  
Avinash Kumar  
Answer Answer here.

1:12:55.960 --> 1:13:1.0  
Avinash Kumar  
Here in last I have a mentioned bootstrap dot mean dot CSS.

1:13:4.740 --> 1:13:5.120  
Avinash Kumar  
Yes, yes.

1:13:3.710 --> 1:13:8.730  
Bibhuranjan Mohanty  
Mean bootstrap dot CS also will work, so let's see.

1:13:21.530 --> 1:13:23.550  
Bibhuranjan Mohanty  
Some stuff that actually can also work.

1:13:28.490 --> 1:13:29.190  
Bibhuranjan Mohanty  
So mad.

1:13:29.250 --> 1:13:33.170  
Bibhuranjan Mohanty  
OK, so this this part having some issue.

1:13:33.320 --> 1:13:36.60  
Bibhuranjan Mohanty  
I will take a little bit of time.

1:13:36.70 --> 1:13:38.480  
Bibhuranjan Mohanty  
I will resolve it one you try of your own.

1:13:38.490 --> 1:13:41.360  
Bibhuranjan Mohanty  
If you're not possible, then tomorrow I will explain.

1:13:41.910 --> 1:13:44.420  
Bibhuranjan Mohanty  
OK, I I can resolve this.

1:13:48.450 --> 1:13:53.140  
Bibhuranjan Mohanty  
But this is the process we can add to how we can add bootstrap into the angle.

1:13:53.430 --> 1:13:53.900  
Bibhuranjan Mohanty  
OK.

1:13:53.970 --> 1:13:57.480  
Bibhuranjan Mohanty  
So yes, normal bootstrap it is not Ng bootstrap.

1:14:3.740 --> 1:14:6.500  
Bibhuranjan Mohanty  
Let me see a little bit of solution, OK.

1:14:31.280 --> 1:14:33.740  
Bibhuranjan Mohanty  
Two where we are.

1:14:35.820 --> 1:14:38.790  
Bibhuranjan Mohanty  
Yeah, in the when we purchase.

1:14:41.480 --> 1:14:41.630  
Bibhuranjan Mohanty  
We.

1:14:43.560 --> 1:14:43.870  
Bibhuranjan Mohanty  
Looks like.

1:14:53.960 --> 1:14:56.710  
Bibhuranjan Mohanty  
So if you one is using bundled or C bundle is not.

1:14:58.590 --> 1:15:2.230  
Bibhuranjan Mohanty  
So let me show this once you use this part maybe.

1:15:32.790 --> 1:15:33.300  
Bibhuranjan Mohanty  
You're just not.

1:15:44.490 --> 1:15:45.800  
Bibhuranjan Mohanty  
OK, I will see it.

1:15:46.730 --> 1:15:47.470  
Marvin  
Excuse yes.

1:15:45.850 --> 1:15:47.610  
Bibhuranjan Mohanty  
OK, let's take.

1:15:52.510 --> 1:15:56.20  
Bibhuranjan Mohanty  
So this is about your project structure.

1:15:56.230 --> 1:16:2.120  
Bibhuranjan Mohanty  
To tomorrow onwards, we are going to learn about some JavaScript features.

1:16:2.610 --> 1:16:6.380  
Bibhuranjan Mohanty  
After that TypeScript then we will come back to the.

1:16:7.990 --> 1:16:12.140  
Bibhuranjan Mohanty  
Angular features that like it's components decorator.

1:16:12.190 --> 1:16:13.200  
Bibhuranjan Mohanty  
So many things are there.

1:16:13.630 --> 1:16:14.30  
Bibhuranjan Mohanty  
Thank you.

1:16:14.770 --> 1:16:16.80  
Bibhuranjan Mohanty  
Sure, no.

1:16:19.80 --> 1:16:20.820  
Bibhuranjan Mohanty  
Let's let me show you SK.

1:16:22.790 --> 1:16:28.540  
Bibhuranjan Mohanty  
Ohh, so now I'm using this project structure discussion here.

1:16:29.30 --> 1:16:29.560  
Bibhuranjan Mohanty  
Now we have.

1:16:30.790 --> 1:16:38.0  
Bibhuranjan Mohanty  
Now we are moving to learn some programming concept which is related to the JavaScript. OK.

1:16:40.930 --> 1:16:42.440  
Bibhuranjan Mohanty  
Uh, so how many of you are?

1:16:42.510 --> 1:16:46.160  
Bibhuranjan Mohanty  
Uh, do you look familiar with the JavaScript? Hello.

1:16:48.0 --> 1:16:49.520  
Bibhuranjan Mohanty  
Yes, yes, 6 features.

1:16:55.350 --> 1:16:56.710  
SARFARAZ ALAM  
Yes, I know that was like.

1:16:58.370 --> 1:16:58.630  
Bibhuranjan Mohanty  
OK.

1:16:57.900 --> 1:17:0.530  
Amit Kumar Mittal  
That said, I have worked on JavaScript but not yes.

1:17:0.540 --> 1:17:1.460  
Amit Kumar Mittal  
6 features, yeah.

1:17:2.470 --> 1:17:3.90  
Bibhuranjan Mohanty  
OK, OK.

1:17:3.400 --> 1:17:4.150  
Amit Kumar Mittal  
Little bit, yeah.

1:17:3.940 --> 1:17:4.480  
SARFARAZ ALAM  
Yes, in.

1:17:3.930 --> 1:17:10.640  
Bibhuranjan Mohanty  
So not now I'm going to discuss some of the some of the pictures of JavaScript.

1:17:10.690 --> 1:17:12.520  
Bibhuranjan Mohanty  
Let let us see.

1:17:13.450 --> 1:17:18.660  
Bibhuranjan Mohanty  
OK, I'm not going to discuss the normal JavaScript as you know what is exactly JavaScript?

1:17:19.350 --> 1:17:21.60  
Bibhuranjan Mohanty  
What is it, say, history?

1:17:21.70 --> 1:17:25.880  
Bibhuranjan Mohanty  
These are the things I'm not going to use and normally in JavaScript how to create array?

1:17:26.670 --> 1:17:28.160  
Bibhuranjan Mohanty  
How to create function?

1:17:28.170 --> 1:17:32.940  
Bibhuranjan Mohanty  
How to create object OK all these things you you must have idea.

1:17:33.930 --> 1:17:41.760  
Bibhuranjan Mohanty  
OK, so some of the important things which is required, which will be required in our project development.

1:17:41.910 --> 1:17:54.120  
Bibhuranjan Mohanty  
So that thing I'm going to discuss here also specially array concept we we need we need to understand it clearly then function array function and object three things I'm going to discuss.

1:17:54.420 --> 1:17:59.850  
Bibhuranjan Mohanty  
OK, now you see what is array.

1:17:59.860 --> 1:18:0.440  
Bibhuranjan Mohanty  
Everybody clear.

1:18:1.370 --> 1:18:3.260  
Bibhuranjan Mohanty  
Ah, everybody must have idea.

1:18:3.270 --> 1:18:10.200  
Bibhuranjan Mohanty  
It's a collection of limits and in JavaScript, in Java, in CSA Paris, the collection of similar type of elements.

1:18:10.210 --> 1:18:15.700  
Bibhuranjan Mohanty  
But in JavaScript array can be a collection of this similar type of elements, OK?

1:18:15.790 --> 1:18:30.180  
Bibhuranjan Mohanty  
And you can create array using two type of syntax using this literal or another one is using new keyword new and are OK and this is the ask for the standard.

1:18:30.190 --> 1:18:32.850  
Bibhuranjan Mohanty  
This is the accepted approach.

1:18:33.60 --> 1:18:36.410  
Bibhuranjan Mohanty  
You will create our in JavaScript, OK.

1:18:37.610 --> 1:18:40.650  
Bibhuranjan Mohanty  
And remember, in JavaScript R is nothing.

1:18:40.660 --> 1:18:41.820  
Bibhuranjan Mohanty  
These are the objects.

1:18:42.90 --> 1:18:47.670  
Bibhuranjan Mohanty  
These are the objects since these are the objects, it contains methods and properties OK.

1:18:50.700 --> 1:19:1.10  
Bibhuranjan Mohanty  
And in JavaScript, if we discuss about the properties of array, the array is dynamic and it is sparse and dense.

1:19:1.20 --> 1:19:1.960  
Bibhuranjan Mohanty  
What is Barsarani?

1:19:1.970 --> 1:19:2.570  
Bibhuranjan Mohanty  
What is dense?

1:19:2.580 --> 1:19:3.720  
Bibhuranjan Mohanty  
Sorry, any idea?

1:19:7.60 --> 1:19:7.450  
Bibhuranjan Mohanty  
OK.

1:19:8.340 --> 1:19:17.510  
Bibhuranjan Mohanty  
And since it is upset, it consent consists of number of methods and different methods as well as properties and it is mutable.

1:19:17.520 --> 1:19:20.490  
Bibhuranjan Mohanty  
Mutable means the content of the array.

1:19:20.500 --> 1:19:27.320  
Bibhuranjan Mohanty  
Once you create the array, the content can be changeable and here sparse and dense means.

1:19:27.530 --> 1:19:34.40  
Bibhuranjan Mohanty  
Though I can, uh sparsity means I can live pole in between the means.

1:19:34.50 --> 1:19:40.280  
Bibhuranjan Mohanty  
I can leave blank space and in the array so that is the sparser

1:19:42.130 --> 1:19:43.350  
Bibhuranjan Mohanty  
The you can see here.

1:19:44.500 --> 1:19:45.710  
Bibhuranjan Mohanty  
Then what is denser?

1:19:45.770 --> 1:19:46.430  
Bibhuranjan Mohanty  
What is Barsarani?

1:19:47.650 --> 1:19:52.250  
Bibhuranjan Mohanty  
For the sake of knowledge, I'm just explaining it is it is having no importance.

1:19:54.360 --> 1:20:1.780  
Bibhuranjan Mohanty  
Exactly a dense array, also referred to as a contiguous array, and stores element in a sequential manner in the memory.

1:20:3.190 --> 1:20:14.770  
Bibhuranjan Mohanty  
OK, that means when you are creating the array you will 4th of value sequential OK part in sparsity.

1:20:15.70 --> 1:20:24.260  
Bibhuranjan Mohanty  
What you can do, suppose you have created one array late array plant then this is blanker then I can sell it as it.

1:20:25.650 --> 1:20:26.930  
Bibhuranjan Mohanty  
Spartan no.

1:20:27.510 --> 1:20:36.630  
Bibhuranjan Mohanty  
Here what you have done you have created arios 100 in OK, but how many lives do you have insert inserted here?

1:20:36.850 --> 1:20:40.410  
Bibhuranjan Mohanty  
One that is one string, then remaining 99.

1:20:41.460 --> 1:20:42.530  
Bibhuranjan Mohanty  
This is our own different.

1:20:43.60 --> 1:20:45.310  
Bibhuranjan Mohanty  
So then it is called sparser.

1:20:47.660 --> 1:20:47.920  
Bibhuranjan Mohanty  
OK.

1:20:52.880 --> 1:20:54.450  
Bibhuranjan Mohanty  
OK, there are different way.

1:20:54.460 --> 1:20:55.850  
Bibhuranjan Mohanty  
You can create those parser.

1:20:55.860 --> 1:21:0.330  
Bibhuranjan Mohanty  
For example, you are creating 1 array and you are storing items into it.

1:21:0.740 --> 1:21:2.810  
Bibhuranjan Mohanty  
You are storing item one, item 2.

1:21:2.820 --> 1:21:6.990  
Bibhuranjan Mohanty  
Then you made some comma and you leave this place blank.

1:21:7.0 --> 1:21:7.870  
Bibhuranjan Mohanty  
This place blank.

1:21:8.80 --> 1:21:11.150  
Bibhuranjan Mohanty  
Then you are trying to store another item that is called item 3.

1:21:11.700 --> 1:21:13.740  
Bibhuranjan Mohanty  
Then what will happen that these two?

1:21:15.810 --> 1:21:17.100  
Bibhuranjan Mohanty  
The comps blank.

1:21:17.300 --> 1:21:17.880  
Bibhuranjan Mohanty  
It's whole.

1:21:18.270 --> 1:21:22.560  
Bibhuranjan Mohanty  
So in this case these are in now called Rajesh Parcel.

1:21:22.890 --> 1:21:23.160  
Bibhuranjan Mohanty  
OK.

1:21:24.660 --> 1:22:5.190  
Bibhuranjan Mohanty  
And another way, if you are creating array object using array constructor and while creating you are giving subsides suppose 5020 any size you are giving then the array will be created with it 20 blank spaces so then it can be called as but sparsity and again if your denser is given to you and you are deleting a particular using delete ohh better you are deleting a particular index value so in that case denser is converted into sparser and by increasing supposed one denser is given to you and you are increasing the length of the array the.

1:22:5.680 --> 1:22:8.500  
Bibhuranjan Mohanty  
Again, it will become what person yes.

1:22:13.90 --> 1:22:13.360  
Bibhuranjan Mohanty  
You know.

1:22:15.910 --> 1:22:16.520  
Bibhuranjan Mohanty  
Which which one?

1:22:18.190 --> 1:22:18.610  
Bibhuranjan Mohanty  
Bounced.

1:22:19.840 --> 1:22:23.960  
Bibhuranjan Mohanty  
Yes, the translator is that when you are create assigning.

1:22:25.930 --> 1:22:27.630  
Bibhuranjan Mohanty  
Are they New Orleans here?

1:22:27.640 --> 1:22:30.60  
Bibhuranjan Mohanty  
What you are actually assigning to the are.

1:22:30.410 --> 1:22:33.730  
Bibhuranjan Mohanty  
You are assigning the reference area name not exactly the value.

1:22:34.830 --> 1:22:35.260  
Bibhuranjan Mohanty  
OK.

1:22:35.570 --> 1:22:39.980  
Bibhuranjan Mohanty  
Then within the reference you are you can change the value.

1:22:42.120 --> 1:22:45.410  
Bibhuranjan Mohanty  
But my point so I will show you that it's.

1:22:47.820 --> 1:22:50.410  
Bibhuranjan Mohanty  
And you can see this declaration of empty.

1:22:50.700 --> 1:23:3.690  
Bibhuranjan Mohanty  
You can declare it using constructor function and you can use the template one literal you can use for creating the OK and declaring array with elements.

1:23:3.700 --> 1:23:11.140  
Bibhuranjan Mohanty  
You can also declare array with elements in two way OK in TypeScript as well as in JavaScript.

1:23:11.880 --> 1:23:22.670  
Bibhuranjan Mohanty  
OK, actually TypeScript internally after translate transpile or translate it is generate what JavaScript OK ultimately we are going to deal with the JavaScript.

1:23:23.40 --> 1:23:30.930  
Bibhuranjan Mohanty  
So even though you are using TypeScript, so basic understanding of JavaScript will help you to learn the TypeScript better.

1:23:31.360 --> 1:23:38.920  
Bibhuranjan Mohanty  
OK, so that you can visualize while you are writing Strike TypeScript you can visualize what exactly the JavaScript code will generate.

1:23:39.170 --> 1:23:40.530  
Bibhuranjan Mohanty  
OK anyway.

1:23:43.440 --> 1:23:44.630  
Bibhuranjan Mohanty  
This is not a mutation.

1:23:45.60 --> 1:23:48.550  
Bibhuranjan Mohanty  
Ohh yeah, this is 1 beautiful example.

1:23:49.450 --> 1:23:52.130  
Bibhuranjan Mohanty  
Anybody who can tell me what is with the output of this one?

1:23:54.660 --> 1:23:58.360  
Bibhuranjan Mohanty  
There was Array one is there 12345 is.

1:24:0.670 --> 1:24:8.90  
Bibhuranjan Mohanty  
Yeah, and I read too equal to error one, but it's up to you.

1:24:9.350 --> 1:24:9.900  
Bibhuranjan Mohanty  
It's my.

1:24:12.980 --> 1:24:17.370  
Bibhuranjan Mohanty  
OK, so error one and error two will have having same method.

1:24:18.580 --> 1:24:22.410  
Bibhuranjan Mohanty  
OK so here is it proper way of copying the.

1:24:24.540 --> 1:24:29.760  
Bibhuranjan Mohanty  
It is just copies the reference, it is not copied one thing OK.

1:24:31.430 --> 1:24:33.30  
Bibhuranjan Mohanty  
So you can see.

1:24:35.350 --> 1:24:41.690  
Bibhuranjan Mohanty  
You can see you can understand through this diagram what exactly happened when you are doing this thing OK.

1:24:48.650 --> 1:25:1.940  
Bibhuranjan Mohanty  
So then if you want to copy it's you you want to create exact copy of our existing array then there are three way you can use your slice method or you can use this is called.

1:25:4.300 --> 1:25:7.470  
Bibhuranjan Mohanty  
But what spread operator?

1:25:7.780 --> 1:25:19.990  
Bibhuranjan Mohanty  
It is ES6 feature, OK and you can use Ari dot from so there are three methods you can create, exert copy of existing array.

1:25:20.300 --> 1:25:26.70  
Bibhuranjan Mohanty  
OK, if you want to see, uh, let me move that.

1:26:5.580 --> 1:26:5.780  
Bibhuranjan Mohanty  
You know.

1:26:15.990 --> 1:26:16.940  
Bibhuranjan Mohanty  
Then I can create.

1:26:21.610 --> 1:26:21.990  
Bibhuranjan Mohanty  
Stop.

1:26:28.320 --> 1:26:28.840  
Bibhuranjan Mohanty  
Right.

1:27:2.860 --> 1:27:11.430  
Bibhuranjan Mohanty  
So now it is creating OK, so this is one way and you can also create except for people.

1:27:13.890 --> 1:27:14.220  
Bibhuranjan Mohanty  
Who?

1:27:35.90 --> 1:27:35.230  
Bibhuranjan Mohanty  
Yeah.

1:27:35.470 --> 1:27:38.0  
Bibhuranjan Mohanty  
Is it another way of work?

1:27:39.50 --> 1:27:42.0  
Bibhuranjan Mohanty  
OK, you try with this.

1:27:46.570 --> 1:27:55.840  
Bibhuranjan Mohanty  
Then let's since are is and opposite it is consist of methods and properties and the methods.

1:27:57.170 --> 1:28:2.560  
Bibhuranjan Mohanty  
So the the properties there are two properties, one is length property and other one is prototype.

1:28:2.830 --> 1:28:11.110  
Bibhuranjan Mohanty  
OK, so you know how can we see if you run a the code in the browser?

1:28:11.300 --> 1:28:12.470  
Bibhuranjan Mohanty  
Let me create one.

1:28:16.600 --> 1:28:20.230  
Bibhuranjan Mohanty  
Still, let me write this word.

1:28:36.130 --> 1:28:38.590  
Bibhuranjan Mohanty  
This doesn't, yeah, but yeah, believe.

1:28:39.140 --> 1:28:41.90  
Bibhuranjan Mohanty  
No, I think for me like directly.

1:28:42.950 --> 1:28:43.410  
Bibhuranjan Mohanty  
Live alone.

1:28:50.790 --> 1:28:50.950  
Bibhuranjan Mohanty  
Yeah.

1:29:16.540 --> 1:29:16.780  
Bibhuranjan Mohanty  
Cool.

1:29:53.950 --> 1:29:55.590  
Bibhuranjan Mohanty  
This inspected uh.

1:29:55.630 --> 1:29:58.560  
Bibhuranjan Mohanty  
Now you can see I just have done what?

1:29:59.500 --> 1:30:14.430  
Bibhuranjan Mohanty  
Unsolder clock so I I'm trying to print the array oxide so in the browser's console you can able to see this array object and if you expand it you will get two things one it length and other one is prototype under the prototype.

1:30:14.440 --> 1:30:17.570  
Bibhuranjan Mohanty  
If you expand you will get some predefined methods.

1:30:17.800 --> 1:30:21.130  
Bibhuranjan Mohanty  
OK, these are the methods out of this method.

1:30:21.500 --> 1:30:28.90  
Bibhuranjan Mohanty  
Some of the method you will use frequently, so I have listed all these methods.

1:30:28.100 --> 1:30:32.750  
Bibhuranjan Mohanty  
Here you can able to see these are all methods under the array object.

1:30:32.990 --> 1:30:40.0  
Bibhuranjan Mohanty  
But here I'm going to use the map reduce, filter and other functions you can learn from any tutorial.

1:30:40.150 --> 1:30:47.780  
Bibhuranjan Mohanty  
OK, so this is a little bit tricky because they are all using one concept that is called callback function concept.

1:30:47.870 --> 1:30:48.460  
Bibhuranjan Mohanty  
OK.

1:30:48.550 --> 1:30:51.890  
Bibhuranjan Mohanty  
We are going to discuss about this callback function.

1:30:53.20 --> 1:30:55.430  
Bibhuranjan Mohanty  
OK, now you see the boost.

1:30:56.220 --> 1:31:1.90  
Bibhuranjan Mohanty  
Ohh pop method, it is just working as teleport principle.

1:31:1.380 --> 1:31:9.90  
Bibhuranjan Mohanty  
OK, I can dynamically enter the work boost value into the array and I can remove value from the.

1:31:9.480 --> 1:31:13.510  
Bibhuranjan Mohanty  
So this is working on the Lippo principle and this is this will work.

1:31:13.520 --> 1:31:22.170  
Bibhuranjan Mohanty  
Then people, people saved and unsaved OK and you can convert 1 array into string using the two string method.

1:31:22.540 --> 1:31:25.830  
Bibhuranjan Mohanty  
These methods you can practice and keep.

1:31:25.840 --> 1:31:29.530  
Bibhuranjan Mohanty  
You can see the tutoring, the current recommended to you.

1:31:30.160 --> 1:31:30.630  
Bibhuranjan Mohanty  
OK.

1:31:30.940 --> 1:31:35.350  
Bibhuranjan Mohanty  
And then ohh this is 1 interesting slice and splice.

1:31:35.360 --> 1:31:37.550  
Bibhuranjan Mohanty  
I'm not going to discuss this one.

1:31:37.900 --> 1:31:39.790  
Bibhuranjan Mohanty  
Ohh OK you will see this.

1:31:39.840 --> 1:31:47.470  
Bibhuranjan Mohanty  
What is the use of slice and splice actually mostly in interview the the peoples are asking this difference.

1:31:47.720 --> 1:31:54.310  
Bibhuranjan Mohanty  
OK, uh, now, no, actually, I'm going to discuss about map reduce and filter function.

1:31:55.170 --> 1:32:1.110  
Bibhuranjan Mohanty  
So before discussing the those function, we should understand what is actually callbacks.

1:32:1.550 --> 1:32:2.60  
Bibhuranjan Mohanty  
OK.

1:32:2.310 --> 1:32:5.500  
Bibhuranjan Mohanty  
You you see here the callbacks are the functions.

1:32:5.510 --> 1:32:10.830  
Bibhuranjan Mohanty  
These are all functions that are passed to other function as parameter.

1:32:10.990 --> 1:32:19.350  
Bibhuranjan Mohanty  
So in in JavaScript there is a feature I can pass a function as argument to another function.

1:32:19.720 --> 1:32:21.630  
Bibhuranjan Mohanty  
OK, but in Java it is very difficult.

1:32:22.680 --> 1:32:33.580  
Bibhuranjan Mohanty  
OK, so there are necessary for asynchronous code to to achieve the asynchronous nature of JavaScript asynchronous report.

1:32:34.470 --> 1:32:52.30  
Bibhuranjan Mohanty  
Well, the callback function plays an important role, OK, and it is one of the most powerful properties of the JavaScript that functions are the first class citizen in the JavaScript and this means that they are like any other object and have the same properties as standard.

1:32:52.480 --> 1:32:54.720  
Bibhuranjan Mohanty  
So now look at this code snippet.

1:32:55.640 --> 1:32:59.50  
Bibhuranjan Mohanty  
What is exactly callback function you can see here.

1:33:0.840 --> 1:33:6.900  
Bibhuranjan Mohanty  
So this is 1 function declaration and this function is what it is returning.

1:33:7.760 --> 1:33:8.490  
Bibhuranjan Mohanty  
Another function.

1:33:9.500 --> 1:33:13.50  
Bibhuranjan Mohanty  
So what you have done, you just have created one variable.

1:33:14.210 --> 1:33:15.980  
Bibhuranjan Mohanty  
Then you just call this function.

1:33:16.750 --> 1:33:20.950  
Bibhuranjan Mohanty  
You make it function call then this function.

1:33:21.210 --> 1:33:23.410  
Bibhuranjan Mohanty  
This variable will refer to whom.

1:33:26.650 --> 1:33:30.250  
Bibhuranjan Mohanty  
The function which is written this function is it clear?

1:33:32.810 --> 1:33:40.360  
Bibhuranjan Mohanty  
Now, if if you if you try to print this variable then this variable will print function type.

1:33:42.60 --> 1:33:47.110  
Bibhuranjan Mohanty  
OK, then you can simply use this one for calling the function.

1:33:48.910 --> 1:33:49.840  
Bibhuranjan Mohanty  
Then what will happen?

1:33:50.110 --> 1:33:54.140  
Bibhuranjan Mohanty  
It will call this one everybody.

1:33:54.650 --> 1:33:57.40  
Bibhuranjan Mohanty  
So in JavaScript this is the feature.

1:33:57.150 --> 1:33:58.910  
Bibhuranjan Mohanty  
OK, let me copy this one.

1:34:0.560 --> 1:34:3.60  
Bibhuranjan Mohanty  
Execute here so that you can able to understand.

1:34:31.40 --> 1:34:32.730  
Bibhuranjan Mohanty  
Let's come at this part.

1:34:37.230 --> 1:34:42.480  
Bibhuranjan Mohanty  
So now you can see it is showing function and this function are being no name.

1:34:42.490 --> 1:34:46.220  
Bibhuranjan Mohanty  
That's why it is showing unanimous and letter.

1:34:46.230 --> 1:34:49.220  
Bibhuranjan Mohanty  
You are just calling this variable.

1:34:50.460 --> 1:34:57.660  
Bibhuranjan Mohanty  
Asit function call then it is going to call this one and it is printing what?

1:34:59.990 --> 1:35:3.590  
Bibhuranjan Mohanty  
The OK, now it just act as a callback.

1:35:5.570 --> 1:35:6.730  
Bibhuranjan Mohanty  
So now you see here.

1:35:10.530 --> 1:35:25.360  
Bibhuranjan Mohanty  
We can also pass function in other function, but example ohh this is a function that is called log and this is the function function color and it is receiving what one other woman one argument.

1:35:25.820 --> 1:35:31.560  
Bibhuranjan Mohanty  
So you when you are calling the function color, you are just passing what this function.

1:35:32.860 --> 1:35:38.290  
Bibhuranjan Mohanty  
But my point, OK, this log is assigned to her to this for FN.

1:35:38.680 --> 1:35:42.850  
Bibhuranjan Mohanty  
Now what you are trying to do, you are trying to call this FN?

1:35:43.20 --> 1:35:44.690  
Bibhuranjan Mohanty  
Then what?

1:35:45.100 --> 1:35:51.670  
Bibhuranjan Mohanty  
Internally it will call calling function, so this is called callware function no.

1:35:52.180 --> 1:35:55.490  
Bibhuranjan Mohanty  
So now your log is the callback function.

1:35:56.580 --> 1:35:57.130  
Bibhuranjan Mohanty  
Everybody clear.

1:35:58.880 --> 1:36:1.290  
Bibhuranjan Mohanty  
So look at here.

1:36:2.430 --> 1:36:5.910  
Bibhuranjan Mohanty  
This course snippet oppose you have written one function.

1:36:7.110 --> 1:36:8.500  
Bibhuranjan Mohanty  
Uh, that is called multiply.

1:36:8.570 --> 1:36:13.600  
Bibhuranjan Mohanty  
It is used to find the multiplication of two argument.

1:36:14.370 --> 1:36:16.330  
Bibhuranjan Mohanty  
Now you have created another function.

1:36:17.630 --> 1:36:18.790  
Bibhuranjan Mohanty  
Here what you are doing.

1:36:21.920 --> 1:36:31.0  
Bibhuranjan Mohanty  
You are a pastor, one taking one argument which will receive the function and which will receive the two value. OK.

1:36:33.70 --> 1:36:35.80  
Bibhuranjan Mohanty  
Then you can write it the code here.

1:36:35.270 --> 1:36:36.40  
Bibhuranjan Mohanty  
Let me write it.

1:36:52.610 --> 1:36:53.510  
Bibhuranjan Mohanty  
So what I'm doing here?

1:37:6.40 --> 1:37:7.910  
Bibhuranjan Mohanty  
Look, you're also returning something.

1:37:14.690 --> 1:37:17.660  
Bibhuranjan Mohanty  
Return have fun.

1:37:20.770 --> 1:37:21.910  
Bibhuranjan Mohanty  
And before so.

1:37:24.270 --> 1:37:24.860  
Bibhuranjan Mohanty  
Don't they look?

1:37:27.200 --> 1:37:27.600  
Bibhuranjan Mohanty  
Speaking.

1:37:29.770 --> 1:37:31.240  
Bibhuranjan Mohanty  
Yes, 60, my suit.

1:37:31.250 --> 1:37:32.530  
Bibhuranjan Mohanty  
My best separate yes.

1:37:34.790 --> 1:37:35.10  
Bibhuranjan Mohanty  
OK.

1:37:37.580 --> 1:37:38.850  
Bibhuranjan Mohanty  
So now what I'm doing here?

1:37:41.120 --> 1:37:42.260  
Bibhuranjan Mohanty  
Console dot log.

1:37:46.680 --> 1:37:47.510  
Bibhuranjan Mohanty  
All multiply.

1:37:49.230 --> 1:37:52.40  
Bibhuranjan Mohanty  
Not here and passing.

1:37:55.820 --> 1:37:58.160  
Bibhuranjan Mohanty  
Multiply it was five.

1:38:0.110 --> 1:38:3.740  
Bibhuranjan Mohanty  
So anybody who can tell what will happen here?

1:38:5.500 --> 1:38:10.300  
Bibhuranjan Mohanty  
So when inside the consultant log you are trying to call this this function.

1:38:11.280 --> 1:38:30.320  
Bibhuranjan Mohanty  
OK, now call multiply function will be called and here you are past what multiply then yeah FN refer to the multiply and this will be the value five and four and inside it FN is referring to 1 multiply.

1:38:31.280 --> 1:38:39.180  
Bibhuranjan Mohanty  
So now you are just trying to pass this value five and four so that it will take and it will return 20.

1:38:40.160 --> 1:38:42.130  
Bibhuranjan Mohanty  
So the value of this will be 20.

1:38:42.140 --> 1:38:45.980  
Bibhuranjan Mohanty  
Again, it will return and now the log will take what 20?

1:38:48.740 --> 1:38:49.70  
Bibhuranjan Mohanty  
Similarly.

1:38:56.470 --> 1:38:57.140  
Bibhuranjan Mohanty  
I will write.

1:38:59.800 --> 1:39:0.220  
Bibhuranjan Mohanty  
Addition.

1:39:5.560 --> 1:39:7.960  
Bibhuranjan Mohanty  
Loss and here.

1:39:16.330 --> 1:39:16.690  
Bibhuranjan Mohanty  
Addition.

1:39:18.520 --> 1:39:20.480  
Bibhuranjan Mohanty  
So will it give output?

1:39:23.320 --> 1:39:23.640  
Bibhuranjan Mohanty  
Yes or no.

1:39:25.40 --> 1:39:27.960  
Bibhuranjan Mohanty  
So let me run this one first.

1:39:29.90 --> 1:39:29.540  
Bibhuranjan Mohanty  
It's not.

1:39:38.110 --> 1:39:42.410  
Bibhuranjan Mohanty  
The nine is coming so here, which one is the callback function?

1:39:44.850 --> 1:39:49.340  
Bibhuranjan Mohanty  
The multiply is a callback function and your addition is also callback function.

1:39:53.240 --> 1:39:58.280  
Bibhuranjan Mohanty  
So instead of writing this, can I write like this just a minute?

1:40:28.770 --> 1:40:30.700  
Bibhuranjan Mohanty  
It's just, uh, look at here.

1:40:31.50 --> 1:40:32.980  
Bibhuranjan Mohanty  
If I will execute this one, what will happen?

1:40:38.980 --> 1:40:42.100  
Bibhuranjan Mohanty  
They to understand this code so previous one everybody clear.

1:40:48.350 --> 1:40:51.280  
Bibhuranjan Mohanty  
Yeah, let's. Bye.

1:40:54.430 --> 1:40:55.50  
Bibhuranjan Mohanty  
OK.

1:40:55.330 --> 1:40:55.680  
Bibhuranjan Mohanty  
Yeah.

1:40:55.730 --> 1:40:57.740  
Bibhuranjan Mohanty  
I just have added a multiply.

1:40:57.830 --> 1:41:0.140  
Bibhuranjan Mohanty  
This is clear now.

1:41:0.590 --> 1:41:4.430  
Bibhuranjan Mohanty  
Instead of using the function name, I have used one anonymous function.

1:41:6.220 --> 1:41:7.420  
Bibhuranjan Mohanty  
OK then.

1:41:10.860 --> 1:41:14.30  
Bibhuranjan Mohanty  
Then this function directly will accept this one.

1:41:15.910 --> 1:41:17.670  
Bibhuranjan Mohanty  
OK, same thing.

1:41:17.720 --> 1:41:20.190  
Bibhuranjan Mohanty  
You can also use arrow function.

1:41:21.260 --> 1:41:23.220  
Bibhuranjan Mohanty  
OK, so here what can I do?

1:41:25.400 --> 1:41:32.110  
Bibhuranjan Mohanty  
I don't need this one will write this one again since there is only one thing.

1:41:33.900 --> 1:41:35.400  
Bibhuranjan Mohanty  
Return keyword is not required.

1:41:37.110 --> 1:41:38.900  
Bibhuranjan Mohanty  
I simply write X into.

1:41:41.750 --> 1:41:43.550  
Bibhuranjan Mohanty  
Like so.

1:41:45.210 --> 1:41:47.830  
Bibhuranjan Mohanty  
This is the auto function, OK.

1:41:49.950 --> 1:41:54.390  
Bibhuranjan Mohanty  
So I that code I just let me write that code also.

1:41:59.390 --> 1:42:5.20  
Bibhuranjan Mohanty  
Just look at the three different way of writing the things and all will give the same output.

1:42:20.320 --> 1:42:23.250  
Bibhuranjan Mohanty  
This will eggs and.

1:42:29.610 --> 1:42:42.880  
Bibhuranjan Mohanty  
OK, now this will become callback function and if I write it in more precise way then I can use arrow function so arrow function will also do the same thing with what this function is doing.

1:42:43.210 --> 1:42:47.190  
Bibhuranjan Mohanty  
But there is a difference between arrow function and the normal function.

1:42:47.280 --> 1:42:48.680  
Bibhuranjan Mohanty  
OK, what is the difference?

1:42:48.690 --> 1:42:49.970  
Bibhuranjan Mohanty  
I will discuss it in the.

1:42:51.630 --> 1:43:8.820  
Bibhuranjan Mohanty  
Subsequent in our coming class, but this one everybody clear callback nature callback function with that means I can call the I function can receive another function as argument and you can call that function letter whenever you required.

1:43:8.950 --> 1:43:12.500  
Bibhuranjan Mohanty  
OK, so this is called called the callback function.

1:43:12.510 --> 1:43:21.910  
Bibhuranjan Mohanty  
Advantage that it eliminates the reputation of the code and it allows the synchronous nature of the JavaScript, even it allow for event binding.

1:43:22.900 --> 1:43:27.430  
Bibhuranjan Mohanty  
OK, data hiding we we can also use so since look.

1:43:28.10 --> 1:43:39.620  
Bibhuranjan Mohanty  
But if discussion of JavaScript is build our scope, I'm not going to that much of depth, but I will discuss some fundamental things now map, reduce, filter.

1:43:39.690 --> 1:43:41.930  
Bibhuranjan Mohanty  
All three functions are using convex function.

1:43:43.330 --> 1:43:46.780  
Bibhuranjan Mohanty  
OK, now if I will discuss then you can able.

1:43:47.350 --> 1:43:49.980  
Bibhuranjan Mohanty  
So let's discuss about the map today.

1:43:49.990 --> 1:43:52.480  
Bibhuranjan Mohanty  
I will only discuss the map method tomorrow.

1:43:52.490 --> 1:43:54.380  
Bibhuranjan Mohanty  
I will discuss the rest of the thing.

1:43:53.520 --> 1:43:54.550  
SARFARAZ ALAM  
How? Yeah.

1:43:55.50 --> 1:43:55.420  
Bibhuranjan Mohanty  
Yes.

1:43:55.430 --> 1:43:56.290  
Bibhuranjan Mohanty  
Yes, hello.

1:43:58.950 --> 1:43:59.970  
SARFARAZ ALAM  
So that is it.

1:43:59.730 --> 1:44:1.440  
Bibhuranjan Mohanty  
And hello.

1:44:5.80 --> 1:44:8.440  
Bibhuranjan Mohanty  
Does your session will come completed 6:30?

1:44:8.500 --> 1:44:10.240  
Bibhuranjan Mohanty  
Another 10 minute is there within 10.

1:44:10.310 --> 1:44:11.500  
Bibhuranjan Mohanty  
I will complete this map.

1:44:11.670 --> 1:44:14.980  
Bibhuranjan Mohanty  
OK, so now you see, look at this example.

1:44:15.70 --> 1:44:15.680  
Bibhuranjan Mohanty  
What?

1:44:15.810 --> 1:44:18.220  
Bibhuranjan Mohanty  
Actually, what is the use of mathnet?

1:44:18.730 --> 1:44:19.570  
Bibhuranjan Mohanty  
Anybody who can say?

1:44:23.480 --> 1:44:28.850  
Bibhuranjan Mohanty  
Map method will create a new array from an existing app as per our requirement.

1:44:29.380 --> 1:44:35.50  
Bibhuranjan Mohanty  
For example, I have one array, it is having 10203040 some value numeric value.

1:44:35.220 --> 1:44:40.240  
Bibhuranjan Mohanty  
I need a new array which will double the each elements which will double each element.

1:44:41.10 --> 1:44:48.940  
Bibhuranjan Mohanty  
In this case I will use Mapper when I need a new array from an existing array with certain criteria.

1:44:49.230 --> 1:44:49.810  
Bibhuranjan Mohanty  
Then I need.

1:44:50.600 --> 1:44:51.540  
Bibhuranjan Mohanty  
What paper?

1:44:51.800 --> 1:44:52.970  
Bibhuranjan Mohanty  
So now you can see here.

1:44:54.240 --> 1:45:1.580  
Bibhuranjan Mohanty  
Suppose this is 1 area 103050 uh, then this is 1.

1:45:1.590 --> 1:45:8.310  
Bibhuranjan Mohanty  
Calculate the area of each circle and boost the result into the new R.

1:45:9.670 --> 1:45:14.520  
Bibhuranjan Mohanty  
This is radius 1030 and 50 in the circle has been given to you.

1:45:14.830 --> 1:45:16.970  
Bibhuranjan Mohanty  
You find area of each circle.

1:45:18.190 --> 1:45:27.260  
Bibhuranjan Mohanty  
OK, so in this case what you need to do if we are not going to use function then we will use traditional for loop.

1:45:28.940 --> 1:45:33.420  
Bibhuranjan Mohanty  
We believe that hours iterate over each individual element.

1:45:34.280 --> 1:45:40.410  
Bibhuranjan Mohanty  
Then we will use your formula of calculating the area by our square.

1:45:41.270 --> 1:45:44.240  
Bibhuranjan Mohanty  
So you can see here the same thing has been done here.

1:45:44.610 --> 1:45:48.970  
Bibhuranjan Mohanty  
We have created a new array, then in the area.

1:45:49.540 --> 1:45:53.150  
Bibhuranjan Mohanty  
Ohh we have so this is not good.

1:45:54.660 --> 1:45:55.670  
Bibhuranjan Mohanty  
This is not good.

1:45:55.940 --> 1:45:56.940  
Bibhuranjan Mohanty  
OK then.

1:45:58.700 --> 1:46:12.190  
Bibhuranjan Mohanty  
But we have done, we are iterate over the Ari I I equal to 0 is less than length I plus plus then ohh to get the what?

1:46:14.50 --> 1:46:26.350  
Bibhuranjan Mohanty  
Well, by value we are using math dot by method is predefined look class object in the JavaScript to buy into circle into circle.

1:46:26.770 --> 1:46:28.220  
Bibhuranjan Mohanty  
Then you are just.

1:46:30.570 --> 1:46:32.700  
Bibhuranjan Mohanty  
Mandingo floor insert.

1:46:34.380 --> 1:46:38.410  
Bibhuranjan Mohanty  
OK, so now your area has been calculated.

1:46:40.580 --> 1:46:41.970  
Bibhuranjan Mohanty  
Uh area variable is required.

1:46:44.860 --> 1:46:46.760  
Bibhuranjan Mohanty  
Yes, idiot.

1:46:47.720 --> 1:46:52.790  
Bibhuranjan Mohanty  
Video calculate it and whatever area is coming, you are just pushing it into.

1:46:52.840 --> 1:46:55.200  
Bibhuranjan Mohanty  
Areas are OK.

1:46:56.480 --> 1:47:1.30  
Bibhuranjan Mohanty  
Finally, your iteration once finished, what will happen?

1:47:1.240 --> 1:47:5.270  
Bibhuranjan Mohanty  
All the calculated value will present inside this new.

1:47:5.280 --> 1:47:19.350  
Bibhuranjan Mohanty  
I then you need to print and this is the traditional approach and if your it it requires a lot of code to write OK but if we use map method it will finish in a single line.

1:47:20.140 --> 1:47:21.740  
Bibhuranjan Mohanty  
So now you can see.

1:47:23.830 --> 1:47:30.200  
Bibhuranjan Mohanty  
So this was the picture before the yes, six actually and in yes.

1:47:33.70 --> 1:47:38.320  
Bibhuranjan Mohanty  
You see, you can use map method simple you use circle dot map.

1:47:38.550 --> 1:47:41.140  
Bibhuranjan Mohanty  
Then you just call it callback function.

1:47:41.150 --> 1:47:42.870  
Bibhuranjan Mohanty  
You can see this is a callback function.

1:47:45.760 --> 1:48:0.0  
Bibhuranjan Mohanty  
OK, so map method will do what for each element it will pick a call this function for each element it will call this function OK?

1:48:0.70 --> 1:48:1.720  
Bibhuranjan Mohanty  
And what about the result is coming?

1:48:1.870 --> 1:48:4.280  
Bibhuranjan Mohanty  
It will post it in into the new area.

1:48:5.250 --> 1:48:7.200  
Bibhuranjan Mohanty  
It will internally create a new array.

1:48:7.710 --> 1:48:11.340  
Bibhuranjan Mohanty  
So same logic has been written inside the map method actually.

1:48:12.110 --> 1:48:13.420  
Bibhuranjan Mohanty  
OK, it will it.

1:48:13.490 --> 1:48:15.90  
Bibhuranjan Mohanty  
Inside this map method.

1:48:16.970 --> 1:48:24.180  
Bibhuranjan Mohanty  
Will pick first element from the circle saree and pass it into this anonymous function.

1:48:24.690 --> 1:48:27.140  
Bibhuranjan Mohanty  
Then the calculation will takes place.

1:48:27.730 --> 1:48:30.360  
Bibhuranjan Mohanty  
The ones that are calculation is takes place internally.

1:48:30.370 --> 1:48:33.570  
Bibhuranjan Mohanty  
It will create a new array and insert the new value.

1:48:33.870 --> 1:48:38.630  
Bibhuranjan Mohanty  
Then it iterate over the another element of this circle array.

1:48:39.530 --> 1:48:43.560  
Bibhuranjan Mohanty  
Then what it is doing, do the calculation.

1:48:44.110 --> 1:48:49.60  
Bibhuranjan Mohanty  
So finally it wants all the elements interesting finishes.

1:48:49.320 --> 1:48:57.260  
Bibhuranjan Mohanty  
Then you are has been created and map method returns that new array and that new array stored into this areas variable.

1:48:57.570 --> 1:48:58.110  
Bibhuranjan Mohanty  
Everybody clear?

1:48:59.370 --> 1:49:6.310  
Bibhuranjan Mohanty  
OK, so this is callback function and map reduce filter all are using this callback function.

1:49:7.20 --> 1:49:13.190  
Bibhuranjan Mohanty  
OK, so now some examples for you related to understand the map method beta.

1:49:13.460 --> 1:49:16.70  
Bibhuranjan Mohanty  
For example, one array has been given to you.

1:49:16.640 --> 1:49:19.70  
Bibhuranjan Mohanty  
You need to double each element.

1:49:19.260 --> 1:49:20.280  
Bibhuranjan Mohanty  
Then can you do this one?

1:49:21.650 --> 1:49:22.80  
Bibhuranjan Mohanty  
How can you?

1:49:22.90 --> 1:49:24.160  
Bibhuranjan Mohanty  
Do you just write R dot map?

1:49:25.100 --> 1:49:27.130  
Bibhuranjan Mohanty  
Then there's the arrow function.

1:49:27.360 --> 1:49:37.960  
Bibhuranjan Mohanty  
If I you are not using arrow function then what you will do you will write function then parameter A then return into two OK.

1:49:40.380 --> 1:49:41.20  
Bibhuranjan Mohanty  
But see this.

1:49:42.960 --> 1:49:43.290  
Bibhuranjan Mohanty  
To.

1:50:2.630 --> 1:50:4.860  
Bibhuranjan Mohanty  
I'm very yeah.

1:50:9.70 --> 1:50:10.790  
Bibhuranjan Mohanty  
And simply write function.

1:50:15.150 --> 1:50:21.80  
Bibhuranjan Mohanty  
And it will receive 11 number and the return you.

1:50:24.350 --> 1:50:24.940  
Bibhuranjan Mohanty  
And then couple.

1:50:27.0 --> 1:50:27.260  
Bibhuranjan Mohanty  
OK.

1:50:29.300 --> 1:50:30.920  
Bibhuranjan Mohanty  
No, it will print.

1:50:36.210 --> 1:50:36.450  
Bibhuranjan Mohanty  
Double.

1:50:48.580 --> 1:50:55.790  
Bibhuranjan Mohanty  
You can see 2468 so like this you can do different things.

1:50:56.180 --> 1:50:57.670  
Bibhuranjan Mohanty  
Now you can see this is one example.

1:50:58.640 --> 1:50:59.930  
Bibhuranjan Mohanty  
Everybody clear this example?

1:51:0.580 --> 1:51:4.70  
Bibhuranjan Mohanty  
What it is doing it is finding the square root of each element.

1:51:4.420 --> 1:51:5.50  
Bibhuranjan Mohanty  
Second example.

1:51:6.260 --> 1:51:9.330  
Bibhuranjan Mohanty  
This is doubly and thirty example.

1:51:9.990 --> 1:51:14.540  
Bibhuranjan Mohanty  
Suppose area of temperature in Celsius has been given to you.

1:51:14.550 --> 1:51:15.380  
Bibhuranjan Mohanty  
You need to convert.

1:51:15.390 --> 1:51:17.900  
Bibhuranjan Mohanty  
It is for each one is the Fahrenheit.

1:51:18.210 --> 1:51:18.930  
Bibhuranjan Mohanty  
Then how can you do?

1:51:21.430 --> 1:51:21.880  
Bibhuranjan Mohanty  
Sure.

1:51:21.890 --> 1:51:27.520  
Bibhuranjan Mohanty  
This is so now everybody got an idea how how we are writing arrow function.

1:51:27.610 --> 1:51:30.210  
Bibhuranjan Mohanty  
If I convert this into arrow function then what I'll do?

1:51:32.290 --> 1:51:33.670  
Bibhuranjan Mohanty  
Our remote dysfunction keyword.

1:51:34.940 --> 1:51:39.630  
Bibhuranjan Mohanty  
Then I will place how Kumar just before the parenthesis.

1:51:40.80 --> 1:51:46.360  
Bibhuranjan Mohanty  
Let's argument, then, if it is having single statement then return you are is not if.

1:51:46.400 --> 1:51:52.620  
Bibhuranjan Mohanty  
If multiple statement then this calibrates you may put if there is single statement.

1:51:54.340 --> 1:51:55.430  
Bibhuranjan Mohanty  
This is not required.

1:51:55.480 --> 1:51:57.30  
Bibhuranjan Mohanty  
Even return keyword is not.

1:52:0.40 --> 1:52:0.940  
Bibhuranjan Mohanty  
And this is.

1:52:3.680 --> 1:52:6.500  
Bibhuranjan Mohanty  
Done so, this is a very precise 1.

1:52:9.680 --> 1:52:13.740  
Bibhuranjan Mohanty  
Similarly, suppose it a list of name has been given to you.

1:52:15.40 --> 1:52:16.310  
Bibhuranjan Mohanty  
What is my requirement?

1:52:16.440 --> 1:52:24.600  
Bibhuranjan Mohanty  
I need to convert the create a new array where each letter initial letter will be in capital.

1:52:26.310 --> 1:52:29.460  
Bibhuranjan Mohanty  
OK, look at this sports nippet so that you can able to understand.

1:52:29.870 --> 1:52:34.530  
Bibhuranjan Mohanty  
So this array, everybody clear and all names are written in small letter.

1:52:34.990 --> 1:52:38.50  
Bibhuranjan Mohanty  
What is my requirement so I need to capitalize the names.

1:52:39.320 --> 1:52:58.700  
Bibhuranjan Mohanty  
OK, so here on the names are you just applied what map painting and from the map method through the map you are picking one element at first which one will be John will come when John will come then.

1:53:0.400 --> 1:53:2.350  
Bibhuranjan Mohanty  
Here the logic has been retained.

1:53:3.330 --> 1:53:13.360  
Bibhuranjan Mohanty  
Fun making capitalized to the first what is happening the from the name character at zero index, the zero index J will pick down.

1:53:13.550 --> 1:53:14.890  
Bibhuranjan Mohanty  
Then you are converting it into.

1:53:17.30 --> 1:53:18.140  
Bibhuranjan Mohanty  
Uppercase now.

1:53:18.150 --> 1:53:43.330  
Bibhuranjan Mohanty  
Now Jain becoming capital letter then you are written named or Slice 1 means from once rest of the one index two rest of the character will ohh come then it is containing the capital J then ohh it's in will we concatenated what my point and then it is pushed into the new array.

1:53:44.80 --> 1:53:46.970  
Bibhuranjan Mohanty  
Then this process will continue for each and every element.

1:53:47.980 --> 1:53:49.390  
Bibhuranjan Mohanty  
Love map function?

1:53:50.250 --> 1:53:54.420  
Bibhuranjan Mohanty  
Then your new area will be created and that new array is returned and stored.

1:53:54.430 --> 1:53:56.960  
Bibhuranjan Mohanty  
Where in the capitalized names.

1:53:57.330 --> 1:54:2.900  
Bibhuranjan Mohanty  
Then if you try then you will get all the names will be in capital.

1:54:3.490 --> 1:54:9.540  
Bibhuranjan Mohanty  
So all of you able to understand this map method because you are going to use this thing in your project also.

1:54:10.400 --> 1:54:13.260  
Bibhuranjan Mohanty  
OK, now this is another case.

1:54:13.520 --> 1:54:15.490  
Bibhuranjan Mohanty  
Just look at what is this?

1:54:18.120 --> 1:54:25.150  
Bibhuranjan Mohanty  
Audio objects in JavaScript we are creating object in calibrates and key and value pair.

1:54:25.400 --> 1:54:36.950  
Bibhuranjan Mohanty  
This is the key and this is the value and one opposite can have multiple properties and against these properties you can have multiple value then this is 1 object.

1:54:37.120 --> 1:54:38.630  
Bibhuranjan Mohanty  
This is one book object.

1:54:38.640 --> 1:54:39.990  
Bibhuranjan Mohanty  
This is also one book object.

1:54:40.0 --> 1:54:46.880  
Bibhuranjan Mohanty  
This is also one book object and in this array there are three books, but my point OK.

1:54:50.940 --> 1:54:52.400  
Bibhuranjan Mohanty  
Then OHS.

1:54:53.90 --> 1:54:56.420  
Bibhuranjan Mohanty  
What it it is the extracting the property value.

1:54:56.690 --> 1:55:2.20  
Bibhuranjan Mohanty  
You'll need to extract only the entails it was book object is there.

1:55:2.570 --> 1:55:11.430  
Bibhuranjan Mohanty  
You have to create only to create new array which will content only titles which will contain only titles then.

1:55:15.0 --> 1:55:19.700  
Bibhuranjan Mohanty  
What you need to do, we just write books dot map then.

1:55:22.80 --> 1:55:26.920  
Bibhuranjan Mohanty  
It will pick one object and that object will store where in the book.

1:55:27.880 --> 1:55:32.250  
Bibhuranjan Mohanty  
Then from the book you will get the property object or title.

1:55:32.660 --> 1:55:36.400  
Bibhuranjan Mohanty  
The title will return and that title will read inserted into new array.

1:55:37.660 --> 1:55:37.880  
SARFARAZ ALAM  
Hello.

1:55:39.840 --> 1:55:40.110  
SARFARAZ ALAM  
Sir.

1:55:37.210 --> 1:55:41.300  
Bibhuranjan Mohanty  
So it will iterate over hello, yes.

1:55:40.980 --> 1:55:42.150  
SARFARAZ ALAM  
Yes, Sir, I'm asking.

1:55:42.660 --> 1:55:48.600  
SARFARAZ ALAM  
I'm asking that in inside map function like books dot map there is a book no.

1:55:47.320 --> 1:55:48.720  
Bibhuranjan Mohanty  
Yeah. Yes.

1:55:52.210 --> 1:55:53.620  
Bibhuranjan Mohanty  
Yes, yes, yes, yes.

1:55:48.990 --> 1:55:54.720  
SARFARAZ ALAM  
So you have we can take another name here, book arrow function book dot and.

1:55:53.930 --> 1:55:55.820  
Bibhuranjan Mohanty  
You let me let me do this.

1:55:56.230 --> 1:55:58.300  
Bibhuranjan Mohanty  
So this this will be the last discussion for today.

1:55:58.830 --> 1:55:59.140  
Bibhuranjan Mohanty  
So let's.

1:55:59.280 --> 1:55:59.550  
SARFARAZ ALAM  
No.

1:56:0.930 --> 1:56:1.750  
Bibhuranjan Mohanty  
OK, this is the book.

1:56:2.550 --> 1:56:2.790  
SARFARAZ ALAM  
Umm.

1:56:2.690 --> 1:56:8.200  
Bibhuranjan Mohanty  
OK, then you need to create UH-1 Ari.

1:56:14.980 --> 1:56:17.440  
Bibhuranjan Mohanty  
Battles, you know.

1:56:19.20 --> 1:56:20.780  
Bibhuranjan Mohanty  
But I can go start map.

1:56:23.510 --> 1:56:24.890  
Bibhuranjan Mohanty  
Yeah, I can write two.

1:56:25.140 --> 1:56:26.910  
Bibhuranjan Mohanty  
Let me use a normal function.

1:56:28.780 --> 1:56:30.40  
Bibhuranjan Mohanty  
That you can able to understand.

1:56:31.70 --> 1:56:31.770  
Bibhuranjan Mohanty  
Yeah, I'm writing.

1:56:36.40 --> 1:56:37.210  
Bibhuranjan Mohanty  
Then what it will return?

1:56:39.810 --> 1:56:43.220  
Bibhuranjan Mohanty  
So we'll return return.

1:56:45.970 --> 1:56:46.270  
Bibhuranjan Mohanty  
Right.

1:56:47.410 --> 1:56:47.630  
SARFARAZ ALAM  
Umm.

1:56:49.260 --> 1:56:49.830  
Bibhuranjan Mohanty  
This is clear.

1:56:50.790 --> 1:56:50.970  
SARFARAZ ALAM  
Yes.

1:56:50.500 --> 1:56:55.800  
Bibhuranjan Mohanty  
So this map function calls this callback function.

1:56:55.880 --> 1:57:2.630  
Bibhuranjan Mohanty  
OK, bypassing the first object, it picks this object pass into this callback function.

1:57:3.550 --> 1:57:3.960  
SARFARAZ ALAM  
Umm.

1:57:3.510 --> 1:57:6.410  
Bibhuranjan Mohanty  
Then this argument will refer to this object.

1:57:7.560 --> 1:57:9.150  
Bibhuranjan Mohanty  
OK, this is the book object.

1:57:9.220 --> 1:57:13.590  
Bibhuranjan Mohanty  
One first book object, then from the book object you are picking the title.

1:57:14.40 --> 1:57:20.820  
Bibhuranjan Mohanty  
Then, since it is written, the math function map function internally creates 1 array and it boosts this value into this array.

1:57:21.940 --> 1:57:22.260  
SARFARAZ ALAM  
Umm.

1:57:22.310 --> 1:57:31.960  
Bibhuranjan Mohanty  
First element work is finished, then for second element it is also calling this callback function and pass this object into it.

1:57:32.730 --> 1:57:37.720  
Bibhuranjan Mohanty  
Then your from that second object you are picking the second book title.

1:57:38.390 --> 1:57:48.760  
Bibhuranjan Mohanty  
So like this third book will be also iterate over here, then map function finally returns the new array which is contains only the title of the view.

1:57:48.970 --> 1:57:51.650  
Bibhuranjan Mohanty  
Now if you try to print the book.

1:57:52.720 --> 1:57:52.930  
SARFARAZ ALAM  
That's.

1:57:56.830 --> 1:57:57.890  
Bibhuranjan Mohanty  
And so that log.

1:58:0.230 --> 1:58:0.720  
SARFARAZ ALAM  
Book titles.

1:58:2.910 --> 1:58:3.580  
Bibhuranjan Mohanty  
Titans.

1:58:3.670 --> 1:58:4.70  
Bibhuranjan Mohanty  
Let's see.

1:58:8.20 --> 1:58:8.310  
Bibhuranjan Mohanty  
So now.

1:58:11.80 --> 1:58:11.200  
SARFARAZ ALAM  
But.

1:58:10.530 --> 1:58:12.480  
Bibhuranjan Mohanty  
It is showing only titles.

1:58:12.680 --> 1:58:13.210  
Bibhuranjan Mohanty  
Everybody clear?

1:58:14.410 --> 1:58:18.350  
Bibhuranjan Mohanty  
OK, so this is the way you can use map function.

1:58:19.120 --> 1:58:21.590  
Bibhuranjan Mohanty  
Uh, this is another example.

1:58:21.470 --> 1:58:23.170  
SARFARAZ ALAM  
But doesn't.

1:58:22.160 --> 1:58:27.720  
Bibhuranjan Mohanty  
Suppose area of object has been given to you and you need to add some what?

1:58:28.600 --> 1:58:31.850  
Bibhuranjan Mohanty  
Uh, unique ID failed to eat 11.

1:58:32.820 --> 1:58:35.500  
Bibhuranjan Mohanty  
OK, so you can do this.

1:58:37.810 --> 1:58:41.830  
Bibhuranjan Mohanty  
So yeah, it will will see in tomorrow session.

1:58:42.730 --> 1:58:44.100  
Bibhuranjan Mohanty  
So up to this, everybody clear.

1:58:44.110 --> 1:58:45.560  
Bibhuranjan Mohanty  
What is the use of map function?

1:58:45.850 --> 1:58:53.250  
Bibhuranjan Mohanty  
So tomorrow we will discuss, reduce and filter and then we will do some complex logical programming related to this one.

1:58:54.40 --> 1:58:57.50  
Bibhuranjan Mohanty  
Then we'll move to other concert Poddar.

1:58:57.60 --> 1:59:6.810  
Bibhuranjan Mohanty  
Tomorrow I will complete JavaScript concept, then we'll discuss the TypeScript, OK and the assignment which I have given to you.

1:59:6.880 --> 1:59:15.900  
Bibhuranjan Mohanty  
Please create one website using angular and bootstrap and using the routing concept navigation concept.

1:59:16.330 --> 1:59:17.690  
Bibhuranjan Mohanty  
You just create a simple website.

1:59:19.660 --> 1:59:21.730  
Bibhuranjan Mohanty  
Now, but use karogi virus.

1:59:21.740 --> 1:59:21.960  
Bibhuranjan Mohanty  
Me.

1:59:23.710 --> 1:59:24.350  
Bibhuranjan Mohanty  
What outing?

1:59:24.360 --> 1:59:36.190  
Bibhuranjan Mohanty  
Link dialog when you are clicking on the home, home component should display when you're clicking on the about, about and if you are adding any content to this your website and you are making your website good.

1:59:36.480 --> 1:59:39.980  
Bibhuranjan Mohanty  
This is also better do it OK.

1:59:43.260 --> 1:59:43.430  
SARFARAZ ALAM  
OK.

1:59:42.580 --> 1:59:44.70  
Bibhuranjan Mohanty  
So any questions from anybody?

1:59:48.670 --> 1:59:48.920  
Bibhuranjan Mohanty  
Hello.

1:59:57.500 --> 1:59:58.910  
Bibhuranjan Mohanty  
So select closely system.

2:0:1.300 --> 2:0:1.460  
SARFARAZ ALAM  
Yes.

2:0:2.830 --> 2:0:3.50  
Bibhuranjan Mohanty  
OK.

2:0:4.310 --> 2:0:4.820  
Bibhuranjan Mohanty  
Thank you all.

2:0:4.780 --> 2:0:6.610  
SARFARAZ ALAM  
But thank.

2:0:5.850 --> 2:0:7.900  
Bibhuranjan Mohanty  
Goodnight all would be to.

2:29:18.210 --> 2:29:19.100  
Manoj Kumar Singh  
Insert digital.

2:29:21.830 --> 2:29:24.110  
Manoj Kumar Singh  
He knows that's with my nothing.