

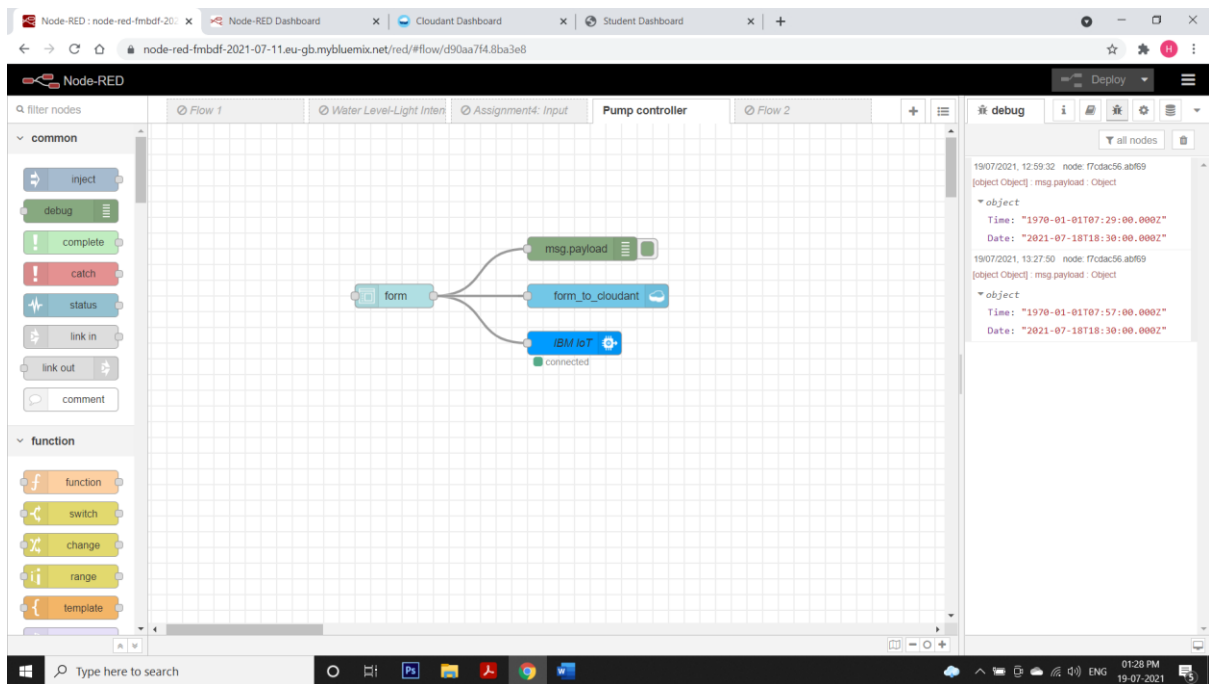
## SmartBridge Externship

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**Assignment 5:** Create a web dashboard to take user input for scheduling the pump controller (date & time). store the data in the Cloudant DB.

you can use Form Nodes in dashboard nodes to take user input.



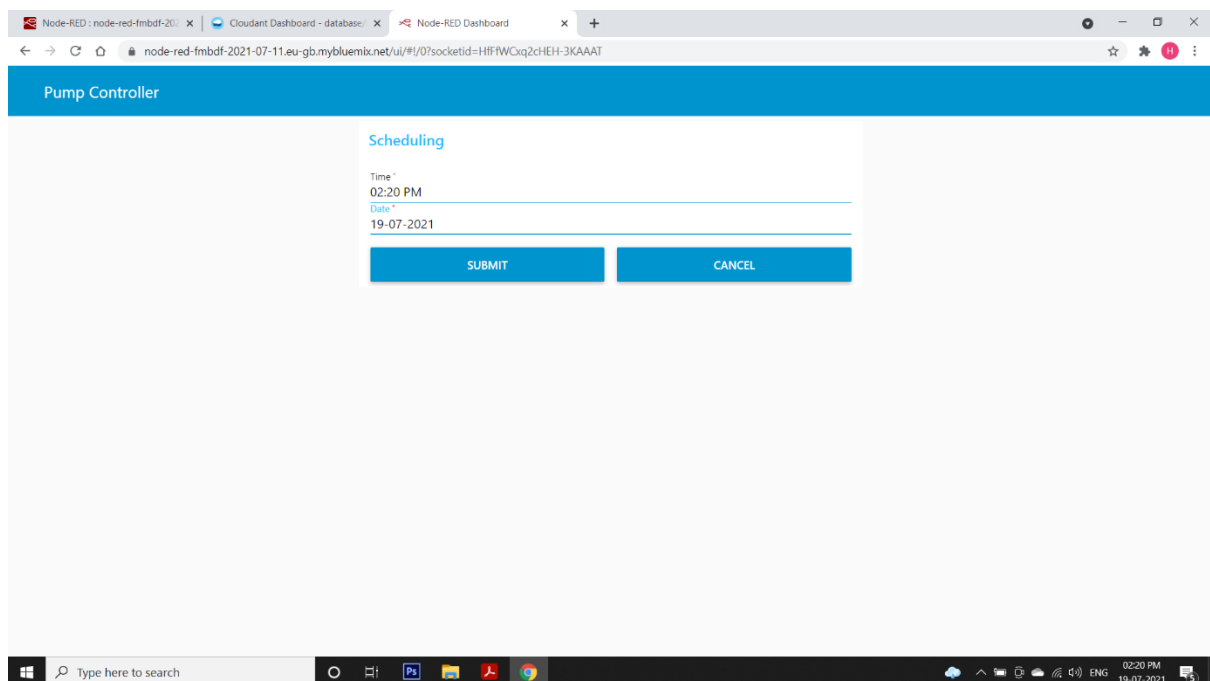
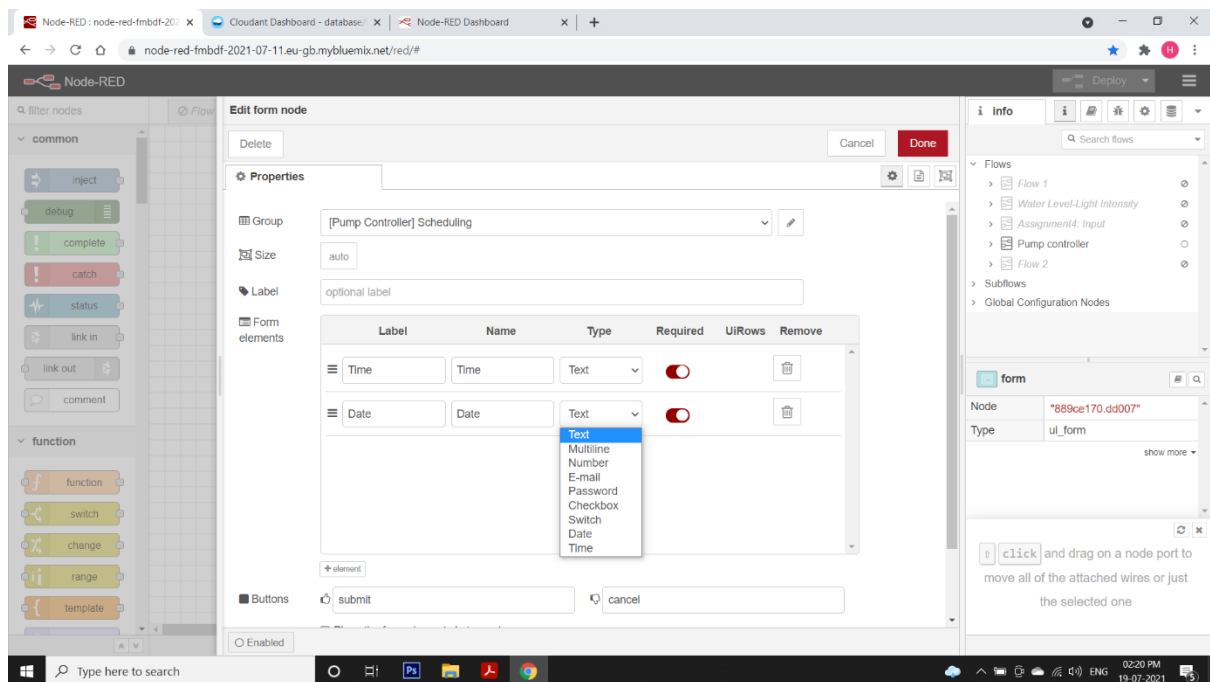
Node-red flow

In the Cloudant DB, a new database with the name “form\_to\_cloudant” will be formed. Any data (data from “Form” dashboard) sent through the above flow after deploying the nodes, will be stored as documents in “form\_to\_cloudant” database.

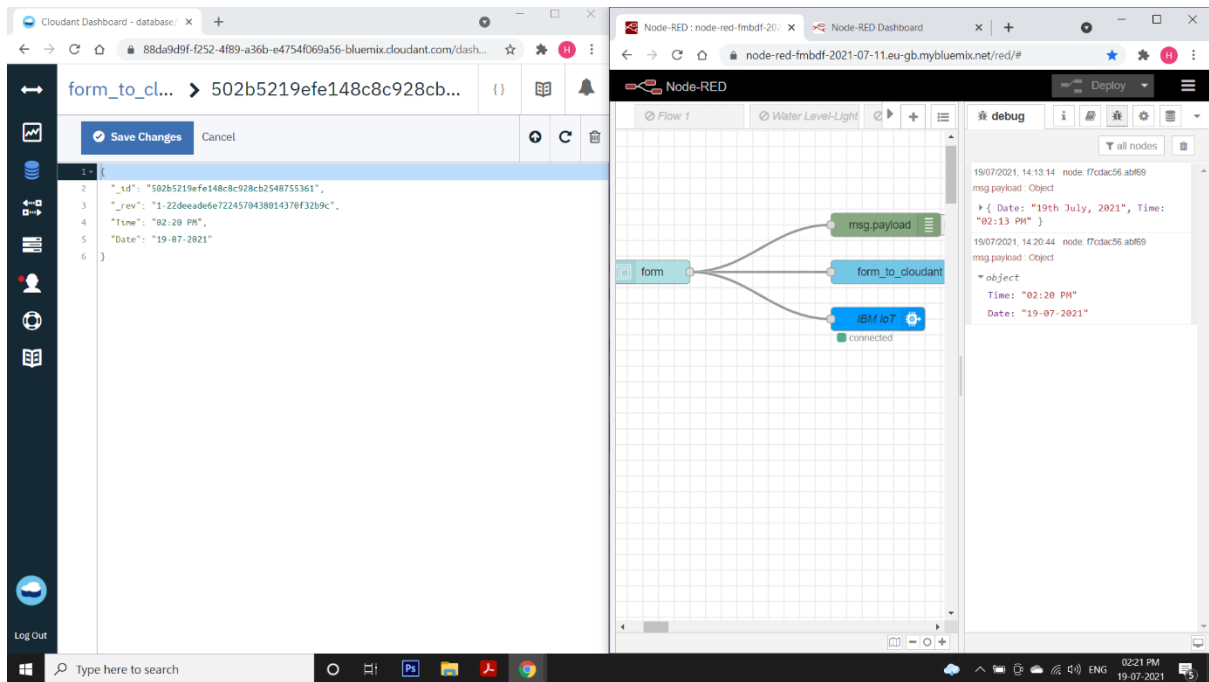
User given input “Date” and “Time” can be stored in:

- (1) Format manually typed by the user: Using “Text” type in Form Node
- (2) ISO-8601 format: Using “Time” and “Date” type in Form Node

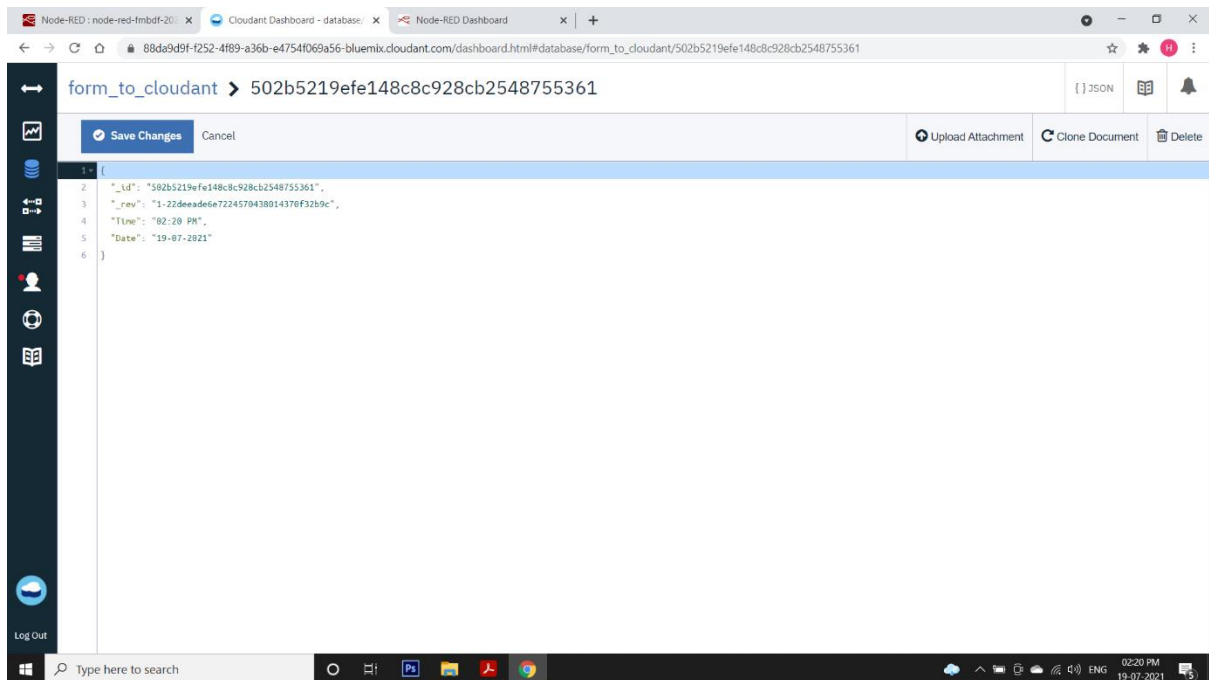
## (1) In Form Node- Using “Text” type:



Visualization of manually typed Time and Date using “Text” Type in Form Dashboard

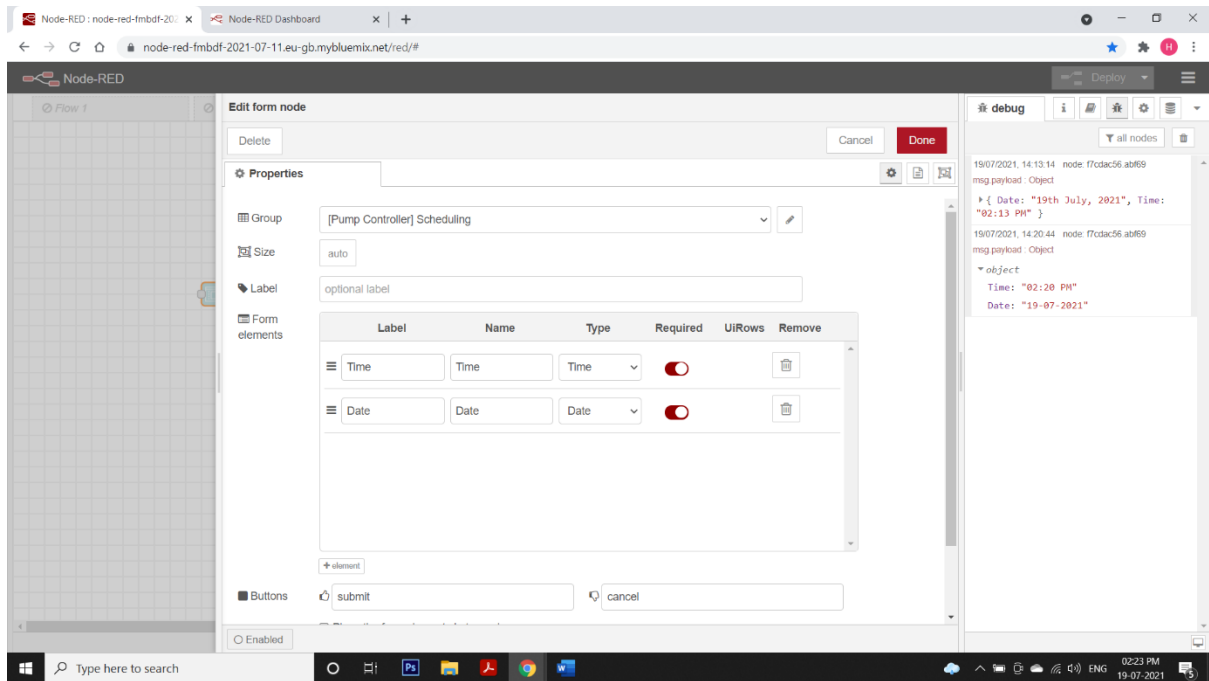


Debug screen of Node-red

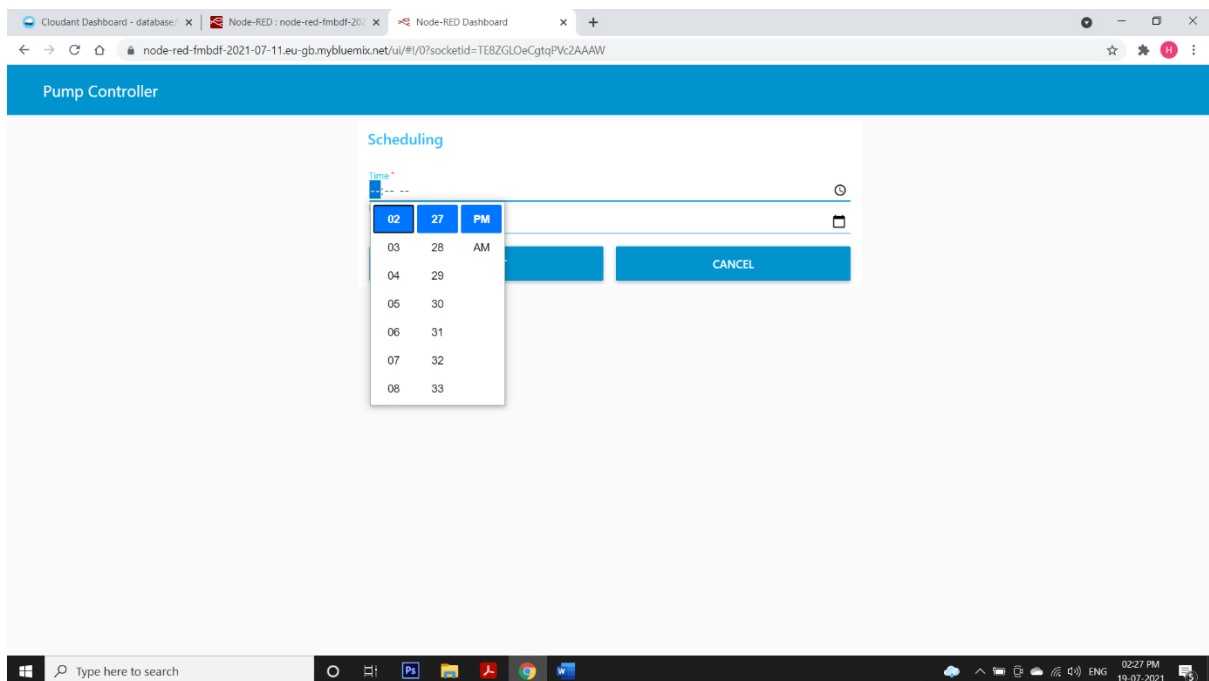


User given Date and Time stored in Cloudant DB

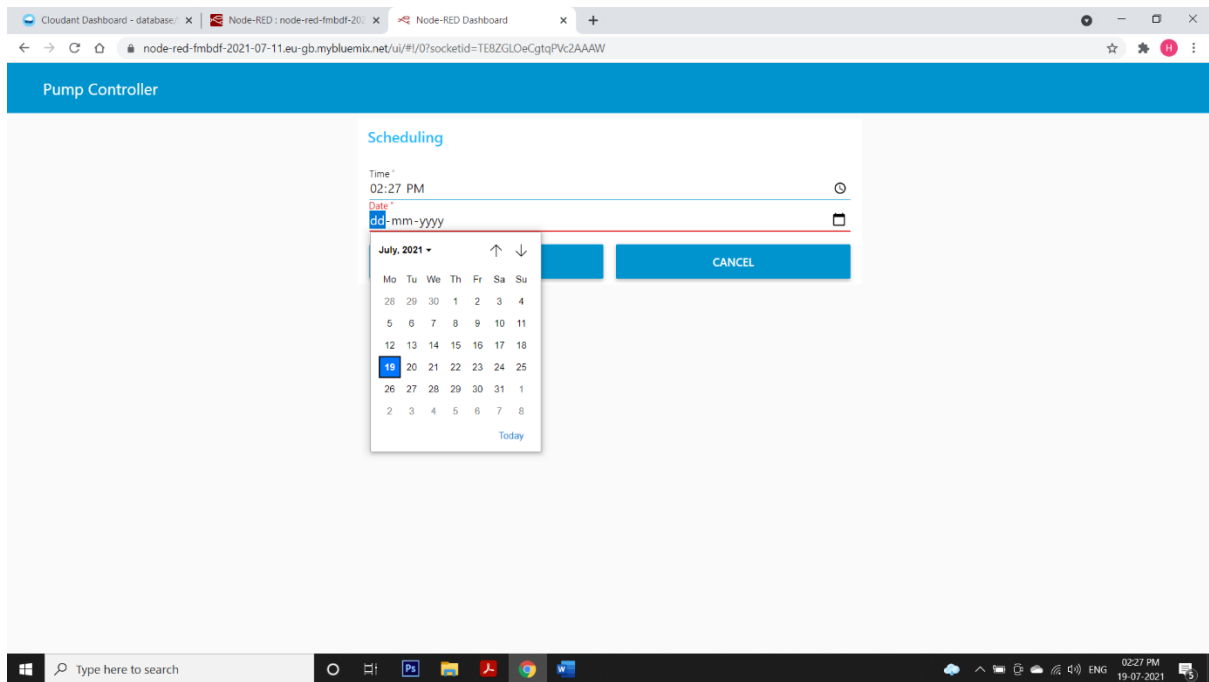
## (2) In Form Node- Using “Time” and “Date” type:



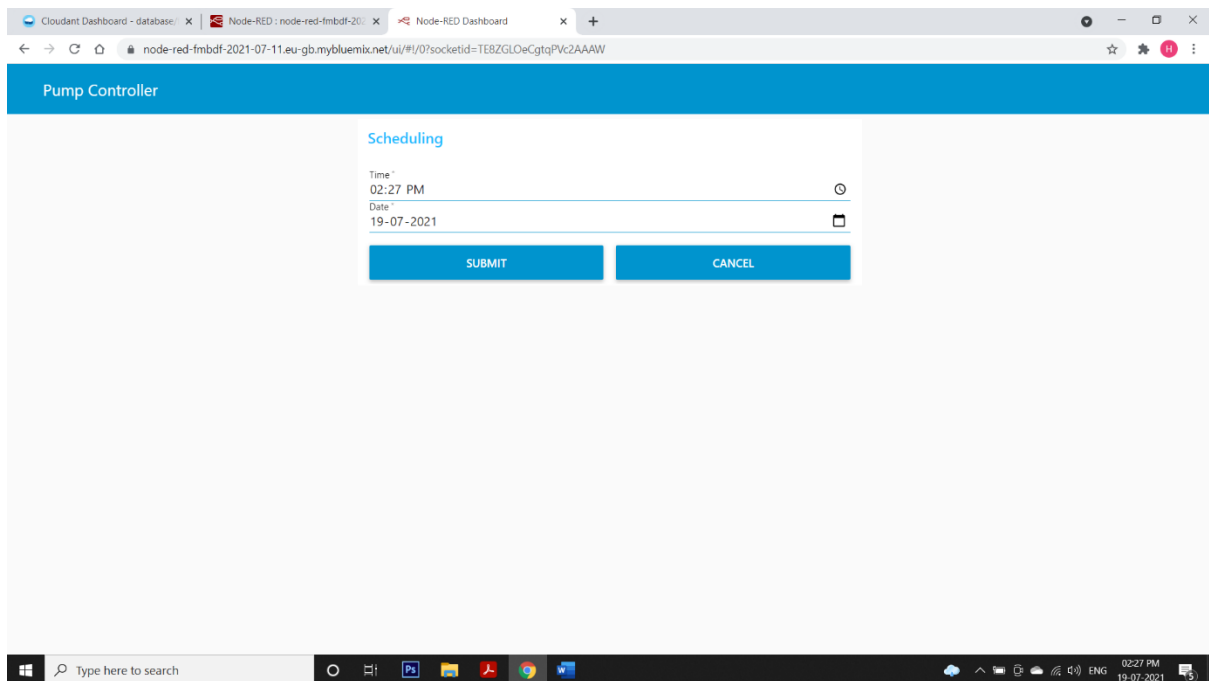
Form node Configuration using “Time” and “Date” type



Select Time



Select Date



Visualization of Time and Date input provided

The screenshot shows the Cloudant Databases dashboard. The browser tabs include Node-RED, Node-RED Dashboard, Cloudant Dashboard, and Student Dashboard. The URL is 88da9d9f-f252-4f89-a36b-e4754f069a56-bluemix.cloudant.com/dashboard.html#/all\_dbs. The dashboard title is "Databases". On the right, there is a "Database name" dropdown, a "Create Database" button, and a "JSON" button. The main content area is titled "Your Databases" and contains a table with the following data:

Name	Size	# of Docs	Partitioned	Actions
form_to_cloudant	0.8 KB	12	No	[Icons for actions]
noderedfmbdf20210711	39.5 KB	4	No	[Icons for actions]
sample	7.6 KB	77	No	[Icons for actions]

At the bottom right, it says "Showing 1-3 of 3 databases. Databases per page: 20".

## Cloudant Databases

The screenshot shows the Cloudant database view for the "form\_to\_cloudant" database. The browser tabs are the same as the previous screenshot. The URL is 88da9d9f-f252-4f89-a36b-e4754f069a56-bluemix.cloudant.com/dashboard.html#/database/form\_to\_cloudant/all\_docs. The dashboard title is "form\_to\_cloudant". On the right, there is a "Document ID" dropdown, an "Options" button, a "JSON" button, and a "Create Document" button. The main content area shows a table with the following data:

Date	Time	_id
2021-07-20T18:30:00.000Z	1970-01-01T12:05:00.000Z	20d376f7b65203d4859bfc514d07c102
2021-07-18T18:30:00.000Z	1970-01-01T07:57:00.000Z	5dcdb85683c56c0bd420c4e805a95ab
2021-07-21T18:30:00.000Z	1970-01-01T01:30:00.000Z	6702a52e8c2b33d0bde4e142b421cce9
2021-07-17T18:30:00.000Z	1970-01-01T17:20:00.000Z	6702a52e8c2b33d0bde4e142b474f902
2021-07-18T18:30:00.000Z	1969-12-31T20:29:00.000Z	835369eda708482454e832228b9a7528
2021-07-18T18:30:00.000Z	1969-12-31T20:35:00.000Z	835369eda708482454e832228b9beee
2021-07-17T18:30:00.000Z	1970-01-01T12:26:00.000Z	925dab1ac3ee44ba97348c5ea130912
2021-07-19T18:30:00.000Z	1969-12-31T18:35:00.000Z	925dab1ac3ee44ba97348c5ea824ed1
2021-07-18T18:30:00.000Z	1970-01-01T07:29:00.000Z	a2517e4a9a2d0b95e1fe6a684d4b2eeb
2021-07-18T18:30:00.000Z	1969-12-31T18:44:00.000Z	badb90c3425cb0a235b82e055753da1e
2021-07-19T18:30:00.000Z	1969-12-31T18:35:00.000Z	badb90c3425cb0a235b82e055754a4ba
2021-07-21T18:30:00.000Z	1970-01-01T17:30:00.000Z	e51aa5beb45db7152c2e109fb657eee

At the bottom, it says "Showing 3 of 4 columns. Show all columns." and "Showing document 1 - 12. Documents per page: 30".

Documents stored in "input\_to\_cloudant" database

The screenshot shows a web browser window with multiple tabs. The active tab is 'Cloudant Dashboard - database'. The address bar shows the URL: `88da9d9f-f252-4f89-a36b-e4754f069a56-blumix.cloudant.com/dashboard.html#database/form_to_cloudant/835369eda708482454e832228b9a7528`. The page title is 'form\_to\_cloudant > 835369eda708482454e832228b9a7528'. Below the title bar, there are buttons for 'Save Changes', 'Cancel', 'Upload Attachment', 'Clone Document', and 'Delete'. The main content area displays a JSON document with the following fields:

```
{
  "_id": "835369eda708482454e832228b9a7528",
  "_rev": "1-cb814af6bf745968a425d573df228c4",
  "Time": "1969-12-31T20:29:00.000Z",
  "Date": "2021-07-18T18:30:00.000Z"
}
```

The bottom of the screenshot shows a Windows taskbar with the search bar and several application icons. The system clock in the bottom right corner indicates the time is 01:29 PM on 19-07-2021.

A document in “input\_to\_cloudant” database, storing Date and Time in ISO-8601 format