Project Development Phase

Sprint - 2

Source Code

Date	16 November 2022
Team ID	PNT2022TMID44305
Project Name	Personal Expense Tracker
Batch Number	B8-2A4E

Dashboard.jsx

```
import { PushToTalkButton, PushToTalkButtonContainer } from '@speechly/react-ui';
import React from 'react';
import { Details, Main } from '../../components';
import DetailsTrack from '../../components/DetailsTrack/DetailsTrack';
import Navbar from '../../components/Navbar/Navbar';
const Dashboard = () => {
  return (
     <div>
       <div style={{ display: 'flex', flexDirection: 'row' }}>
          <div>
            <Main />
          </div>
          <div>
            <div>
              <Navbar/>
            </div>
```

```
<span>
              <Details title="Income" />
            </span>
            <span>
              <Details title="Expense" />
            </span>
         </div>
         <PushToTalkButtonContainer>
            <PushToTalkButton />
         </PushToTalkButtonContainer>
       </div>
       <div>
         <DetailsTrack title="Income" />
         <DetailsTrack title="Expense" />
       </div>
     </div>
  );
};
export default Dashboard;
Dashboard.js
import { makeStyles } from '@material-ui/core/styles';
export default makeStyles((theme) => ({
  desktop: {
     [theme.breakpoints.up('sm')]: {
       display: 'none',
```

```
},
  },
  mobile: {
    [theme.breakpoints.down('sm')]: {
       display: 'none',
    },
  },
  last: {
    [theme.breakpoints.down('sm')]: {
       marginBottom: theme.spacing(3),
       paddingBottom: '200px',
    },
  },
  grid: {
    '& > *': {
       margin: theme.spacing(2),
    },
  },
}));
Main.jsx
import React from 'react';
import { Card, CardContent, Typography, Grid, Divider } from '@mui/material';
import './main.css';
```

import Form from './Form/Form';

import { useContext } from 'react';

import InfoCard from '../InfoCard';

import { ExpenseTrackerContext } from '../../context/context';

import List from './List/List';

```
import useTransactions from '../../useTransactions';
const Main = () => {
  const { balance } = useContext(ExpenseTrackerContext);
  const { total: incomeTotal } = useTransactions("Income");
  const { total: expenseTotal } = useTransactions("Expense");
  return (
     <Card style={{width: '370px', padding: '10px', backgroundColor: "transparent" }}>
       {/*<CardHeader className="cardHeader" title="Personal Expense Tracker"
subheader="speak to track" />*/}
       <CardContent className="cardContent1">
          <Typography style={{ color: 'rgb(144 122 0)' }} align="center" variant="h6">
            Total Balance: <span style={{ color: 'goldenrod' }}>Rs. {balance}</span>
          </Typography>
          <Typography style={{ color: 'green' }} align="center" variant="h6">
            Income: <span style={{ color: 'rgba(0, 255, 0, 0.9)'
}}>Rs.{incomeTotal}</span>
          </Typography>
          <Typography style={{ color: 'red' }} align="center" variant="h6">
            Expense: \langle \text{span style} = \{ \{ \text{ color: 'rgba}(255, 0, 0, 0.8)' \} \}
}}>Rs.{expenseTotal}</span>
          </Typography>
          <Typography variant="subtitle1" style={{ lineHeight: '1.5em', marginTop: '20px'</pre>
}} >
            <InfoCard />
          </Typography>
```

```
<Divider style={{ borderTop: 'lpx dashed gray', backgroundColor: 'white',</pre>
paddingTop: '15px' }} />
         <Form />
       </CardContent>
       <CardContent className="cardContent2">
         <Grid container spacing={2}>
            <Grid item xs=\{12\}>
              <List/>
            </Grid>
         </Grid>
       </CardContent>
     </Card>
  );
};
export default Main;
main.css
.cardHeader {
  text-align: center;
  border: 2px solid rgb(144 122 0);
  color: rgb(144 122 0);
  border-radius: 5px;
  background-color: white;
}
.cardContent1 {
  border: 2px solid rgb(144 122 0);
  border-radius: 5px;
  background-color: white;
}
```

```
.cardContent2 {
  border: 2px solid rgb(144 122 0);
  border-radius: 5px;
  background-color: white;
}
Form.jsx
import React, { useContext, useEffect, useState } from 'react';
import { TextField, Typography, Grid, FormControl, InputLabel, Select, MenuItem,
OutlinedInput } from '@mui/material';
import { v4 as uuidv4 } from 'uuid';
import './form.css';
import { ExpenseTrackerContext } from '../../context/context';
import { expenseCategories, incomeCategories } from '../../constants/categories';
import formatDate from '../../utils/formatDate';
import { useSpeechContext } from '@speechly/react-client';
import CustomizedSnackbar from '../../Snackbar/Snackbar';
const initialState = {
  amount: ",
  category: ",
  type: 'Income',
  date: formatDate(new Date()),
}
const Form = () \Rightarrow \{
  const [formData, setFormData] = useState(initialState);
  const { addTransaction } = useContext(ExpenseTrackerContext);
  const { segment } = useSpeechContext();
```

```
const [open, setOpen] = useState(false);
const [unfill, setUnfill] = useState(false);
const createTransaction = () => {
  if (formData.category && formData.amount) {
     const transaction = { ...formData, amount: Number(formData.amount), id: uuidv4() }
     addTransaction(transaction);
     setFormData(initialState);
     setOpen(true);
  }
  else {
     setUnfill(true);
     /*swal("Unfulfilled Inputs", "Please fill all the fields", "warning");*/
  }
}
useEffect(() \Rightarrow \{
  if (segment) {
     if (segment.intent.intent === 'add expense') {
       setFormData({ ...formData, type: 'Expense' });
     }
     else if (segment.intent.intent === 'add income') {
       setFormData({ ...formData, type: 'Income' });
     }
     else if (segment.isFinal && segment.intent.intent === 'create transaction') {
       return createTransaction();
```

```
}
       else if (segment.isFinal && segment.intent.intent === 'cancel transaction') {
         return setFormData(initialState);
       segment.entities.forEach((e) => {
         const category = `${e.value.charAt(0)}${e.value.slice(1).toLowerCase()}`;
         switch (e.type) {
            case 'amount':
              setFormData({ ...formData, amount: e.value });
              break;
            case 'category':
              if (incomeCategories.map((ic) => ic.type).includes(category)) {
                 setFormData({ ...formData, type: 'Income', category });
              else if (expenseCategories.map((ec) => ec.type).includes(category)) {
                 setFormData({ ...formData, type: 'Expense', category });
              }
              break;
            case 'date':
              setFormData({ ...formData, date: e.value });
              break;
            default:
              break;
         }
       });
       if (segment.isFinal && formData.type && formData.category && formData.amount
&& formData.date) {
         createTransaction();
```

```
}
    }
    // eslint-disable-next-line
  }, [segment]);
  const selectedCategories = formData.type === 'Income' ? incomeCategories :
expenseCategories;
  return (
    <Grid container spacing={2}>
      <CustomizedSnackbar title="form" open={open} setOpen={setOpen} />
      <CustomizedSnackbar title="unfilled" open={unfill} setOpen={setUnfill} />
      <Grid item xs=\{12\}>
         <Typography align="center" variant="subtitle2" gutterBottom>
           {segment &&
             segment.words.map((w) => w.value).join(" ")
           }
         </Typography>
      </Grid>
      <Grid item xs=\{6\}>
         <FormControl fullWidth>
           <InputLabel>Type</InputLabel>
           <Select
             value={formData.type}
             onChange={(e) => setFormData({ ...formData, type: e.target.value })}
             input={<OutlinedInput label="Type" />}
           >
              <MenuItem value="Income">Income</MenuItem>
              <MenuItem value="Expense">Expense</MenuItem>
           </Select>
```

```
</FormControl>
      </Grid>
      <Grid item xs=\{6\}>
         <FormControl fullWidth>
           <InputLabel>Category</InputLabel>
           <Select
              value={formData.category}
              onChange={(e) => setFormData({ ...formData, category: e.target.value })}
              input={<OutlinedInput label="Category" />}
           >
                selectedCategories.map((c) =>
                  <MenuItem key={c.type} value={c.type}>
                     {c.type}
                  </MenuItem>)
              }
           </Select>
         </FormControl>
      </Grid>
      <Grid item xs=\{6\}>
         <TextField type="number" onKeyDown={(e) => { e.key === 'e' &&
e.preventDefault(); e.key === '-' && e.preventDefault(); e.key === '+' &&
e.preventDefault(); }} label="Amount" fullWidth value={formData.amount} onChange={(e)
=> setFormData({ ...formData, amount: e.target.value })} />
      </Grid>
      <Grid item xs=\{6\}>
         <TextField type="date" label="Date" fullWidth value={formData.date}</pre>
onChange={(e) => setFormData({ ...formData, date: formatDate(e.target.value) })} />
      </Grid>
      <button className="createBtn" onClick={createTransaction} >Create/button>
    </Grid>
  );
```

```
};
export default Form;
form.css
.createBtn {
  margin-top: 50px;
  margin-bottom: 20px;
  margin-left: 16px;
  width: 100%;
  border-radius: 10px;
  padding: 15px;
  border: 2px solid rgb(111 95 0);
  background-color: rgb(231 229 175);
  cursor: pointer;
  color: rgb(111 95 0);
  font-weight: 600;
}
List.jsx
import React from 'react';
import { List as MUIList, ListItem, ListItemAvatar, ListItemText, Avatar,
ListItemSecondaryAction, IconButton, Slide } from '@mui/material';
import CurrencyRupeeIcon from '@mui/icons-material/CurrencyRupee';
import DeleteIcon from '@mui/icons-material/Delete';
import { useContext } from 'react';
import { ExpenseTrackerContext } from '../../context/context';
```

import { useState } from 'react';

```
import CustomizedSnackbar from '../../Snackbar/Snackbar';
import './list.css';
const List = () \Rightarrow \{
  const { deleteTransaction, transactions } = useContext(ExpenseTrackerContext);
  const [open, setOpen] = useState(false);
  return (
    <MUIList dense={false} className='listContainer'>
       <CustomizedSnackbar title="list" open={open} setOpen={setOpen} />
       {transactions.map((transaction) => (
         <Slide direction="down" in mountOnEnter unmountOnExit key={transaction.id}>
            <ListItem>
              <ListItemAvatar>
                 <Avatar style={{backgroundColor: transaction.type === 'Income' ? 'green' :</pre>
'red'}} >
                   <CurrencyRupeeIcon/>
                 </Avatar>
              </ListItemAvatar>
              <ListItemText primary={transaction.category}</pre>
secondary={'Rs.${transaction.amount} - ${transaction.date}'} />
              <ListItemSecondaryAction>
                 <IconButton edge="end" aria-label="delete" onClick={() => {
setOpen(true); deleteTransaction(transaction.id) }} >
                   <DeleteIcon />
                IconButton>
              </ListItemSecondaryAction>
            </ListItem>
```

```
</Slide>
       ))}
     </MUIList>
  );
}
export default List;
ListStyles.js
import { makeStyles } from '@material-ui/core/styles';
import { red, green } from '@material-ui/core/colors';
export default makeStyles((theme) => ({
  avatarIncome: {
     color: '#fff',
    backgroundColor: green[500],
  },
  avatarExpense: {
    color: theme.palette.getContrastText(red[500]),
    backgroundColor: red[500],
  },
  list: {
    maxHeight: '240px',
    overflow: 'auto',
  },
}));
list.css
.avatarIncome {
```

```
color: #fff;
  background-color: green;
}
.avatarExpense {
  color: #fff;
  background-color: red;
}
.listContainer {
  max-height: 240px;
  overflow: auto;
}
context.js
import React, { useReducer, createContext } from 'react';
import contextReducer from './contextReducer';
const initialState = JSON.parse(localStorage.getItem('transaction')) || [];
export const ExpenseTrackerContext = createContext(initialState);
export const Provider = ({ children }) => {
  const [transactions, dispatch] = useReducer(contextReducer, initialState);
  const deleteTransaction = (id) => dispatch({ type: 'DELETE TRANSACTION', payload:
id });
  const addTransaction = (transaction) => dispatch({ type: 'ADD TRANSACTION',
payload: transaction });
```

```
const balance = transactions.reduce((acc, currVal) => (currVal.type === 'Expense' ? acc -
currVal.amount : acc + currVal.amount), 0);
  return (
     <ExpenseTrackerContext.Provider value={{</pre>
       deleteTransaction,
       addTransaction,
       transactions,
       balance,
     }}>
        {children}
     </ExpenseTrackerContext.Provider>
  );
};
InfoCard.jsx
import React from 'react';
const isIncome = Math.round(Math.random());
const InfoCard = () => {
  return (
     <div style={{ textAlign: 'center', padding: '0 10%', paddingBottom: '5%' }}>
       Try saying: <br/>
       Add {isIncome ? 'Income ' : 'Expense '}
       for {isIncome ? 'Rs.100 ' : 'Rs.50 '}
       in Category {isIncome ? 'Business ' : 'House '}
       for {isIncome ? 'Monday ' : 'Friday '}
     </div>
```

```
);
};
export default InfoCard;
useTransaction.jsx
import { useContext } from "react"
import { expenseCategories, incomeCategories, resetCategories } from
"./constants/categories";
import { ExpenseTrackerContext } from "./context/context"
const useTransactions = (title) => {
  resetCategories();
  const { transactions } = useContext(ExpenseTrackerContext);
  const transactionsPerType = transactions.filter((t) => t.type === title);
  const total = transactionsPerType.reduce((acc, currVal) => acc += currVal.amount, 0);
  const categories = title === 'Income' ? incomeCategories : expenseCategories;
  var month = "";
  var monthIncomeTotal = [
     {m:"January", amount:0},
     {m:"February", amount:0},
     {m:"March", amount:0},
     {m:"April", amount:0},
     {m:"May", amount:0},
     {m:"June", amount:0},
     {m:"July", amount:0},
     {m:"August", amount:0},
     {m:"September", amount:0},
     {m:"October", amount:0},
     {m:"November", amount:0},
```

```
{m:"December", amount:0},
];
var monthExpenseTotal = [
  {m:"January", amount:0},
   {m:"February", amount:0},
   {m:"March", amount:0},
  {m:"April", amount:0},
  {m:"May", amount:0},
  {m:"June", amount:0},
  {m:"July", amount:0},
  {m:"August", amount:0},
  {m:"September", amount:0},
  {m:"October", amount:0},
  {m:"November", amount:0},
  {m:"December", amount:0},
];
// transactionsPerType.forEach((t) => {
    console.log(t.amount, t.category, t.type);
// })
transactionsPerType.forEach((t) => \{
  month = t.date.slice(5, 7);
  if (t.type === 'Income') {
    switch(month) {
       case '01': monthIncomeTotal[0].amount += t.amount;break;
       case '02': monthIncomeTotal[1].amount += t.amount;break;
       case '03': monthIncomeTotal[2].amount += t.amount;break;
       case '04': monthIncomeTotal[3].amount += t.amount;break;
```

```
case '05': monthIncomeTotal[4].amount += t.amount;break;
    case '06': monthIncomeTotal[5].amount += t.amount;break;
    case '07': monthIncomeTotal[6].amount += t.amount;break;
    case '08': monthIncomeTotal[7].amount += t.amount;break;
    case '09': monthIncomeTotal[8].amount += t.amount;break;
    case '10': monthIncomeTotal[9].amount += t.amount;break;
    case '11': monthIncomeTotal[10].amount += t.amount;break;
    case '12': monthIncomeTotal[11].amount += t.amount;break;
    default: break;
else if(t.type === 'Expense') {
  switch(month) {
    case '01': monthExpenseTotal[0].amount += t.amount;break;
    case '02': monthExpenseTotal[1].amount += t.amount;break;
    case '03': monthExpenseTotal[2].amount += t.amount;break;
    case '04': monthExpenseTotal[3].amount += t.amount;break;
    case '05': monthExpenseTotal[4].amount += t.amount;break;
    case '06': monthExpenseTotal[5].amount += t.amount;break;
    case '07': monthExpenseTotal[6].amount += t.amount;break;
    case '08': monthExpenseTotal[7].amount += t.amount;break;
    case '09': monthExpenseTotal[8].amount += t.amount;break;
    case '10': monthExpenseTotal[9].amount += t.amount;break;
    case '11': monthExpenseTotal[10].amount += t.amount;break;
    case '12': monthExpenseTotal[11].amount += t.amount;break;
    default: break;
}
```

```
const category = categories.find((c) => c.type === t.category);
  if (category) category.amount += t.amount;
});
const filteredCategories = categories.filter((c) => c.amount > 0);
const chartData = {
  datasets: [{
     data: filteredCategories.map((c) \Rightarrow c.amount),
     backgroundColor: filteredCategories.map((c) => c.color),
  }],
  labels: filteredCategories.map((c) => c.type)
};
const chartDataIncome = {
  datasets: [
       label: 'Income',
       data: monthIncomeTotal.map((m) => m.amount),
       borderColor: '#165f40',
       backgroundColor: '#0bc77e',
       tension: 0.1,
     },
```

```
],
    labels: monthIncomeTotal.map((m) => m.m)
  };
  const chartDataExpense = {
    datasets: [
         label: 'Expense',
         data: monthExpenseTotal.map((m) => m.amount),
         borderColor: '#b50d12',
         backgroundColor: '#e57c58',
         tension: 0.1,
       },
    ],
    labels: monthExpenseTotal.map((m) => m.m)
  };
  return { total, chartData, chartDataIncome, chartDataExpense };
};
export default useTransactions;
```