



Presentació tècnica



Albert Chao Vasco
Eric Clemente Casals
Arnau Orts Brichs

useWebSocket.js

```
socket.onopen = () => {
  console.log("Connected to server");
  let message = JSON.stringify({
    meta: "connection",
    userID: user.uid,
    username: user.username,
  });
  socket.send(message);
};

socket.onmessage = (event) => {
  let { data } = event;
  data = JSON.parse(data);
  const { meta } = data;
  switch (meta) {
    case "receive_message":
      receiveMessage(data);
      break;
    default:
      break;
  }
};
```

```
function sendMessage(messageData) {
  dispatch(sendMessageAction(messageData));
  socket.send(JSON.stringify(messageData));
}

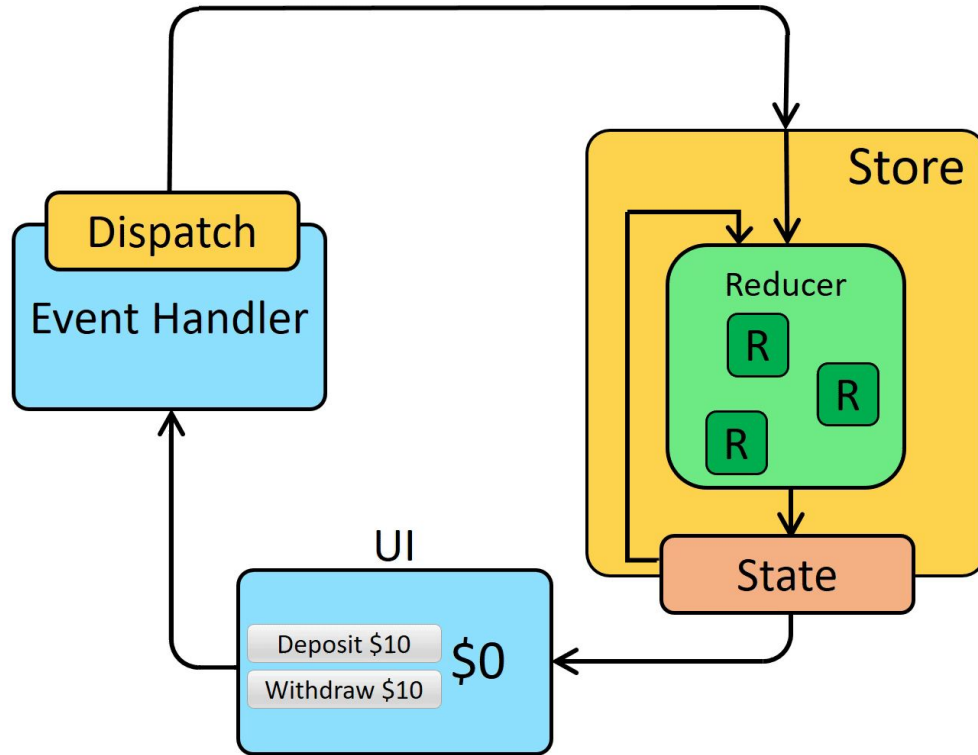
function receiveMessage(messageData) {
  delete messageData.meta;
  delete messageData.groupID;

  dispatch(receiveMessageAction(messageData));
}

function createGroup(groupData) {
  socket.send(JSON.stringify(groupData));
}

function loadGroupMessages(groupID) {
  dispatch(loadGroupMessagesThunk(groupID));
}
```

REDUX





```
const dispatch = useDispatch();
```

```
const reducers = combineReducers({  
  auth: authReducer,  
  chat: chatReducer,  
  groups: groupReducer,  
});
```

```
(alias) createStore<CombinedState<{  
  auth: {  
    user: any;  
    isAuthenticated: boolean;  
  };  
  chat: {  
    activeGroupID: any;  
    messages: any[];  
  };  
  groups: {  
    ...;  
  };  
}>>
```

```
const initialState = {  
  user: null,  
  isAuthenticated: false,  
};  
  
const authReducer = (state = initialState, action) => {  
  let newState;  
  const { type, payload } = action;  
  switch (type) {  
    case authTypes.LOGIN:  
      newState = {  
        user: payload,  
        isAuthenticated: true,  
      };  
      break;  
    case authTypes.UPDATE_USER:  
      newState = {  
        ...state,  
        user: payload,  
      };  
      break;  
    case authTypes.LOGOUT:  
      newState = {  
        user: null,  
        isAuthenticated: false,  
      };  
      break;  
    default:  
      newState = { ...state };  
      break;  
  }  
  return newState;  
};
```



```
export const loginAction = (user) => {
  return {
    type: authTypes.LOGIN,
    payload: user,
  };
};

export const logoutAction = () => {
  return {
    type: authTypes.LOGOUT,
  };
};

export const updateUserAction = (user) => {
  return {
    type: authTypes.UPDATE_USER,
    payload: user,
  };
};
```

```
const authTypes = {
  LOGIN: "AUTH_LOGIN",
  LOGOUT: "AUTH_LOGOUT",

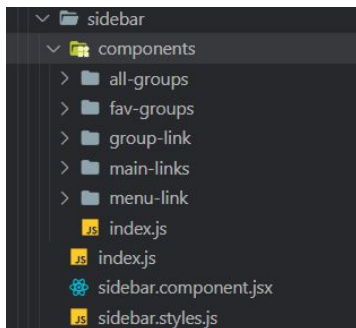
  UPDATE_USER: "AUTH_UPDATE_USER",
};
```

```
export const loginThunk = (email, password) => {
  return async (dispatch) => {
    try {
      await setPersistence(auth, browserLocalPersistence);

      const { user: firebaseUser } = await signInWithEmailAndPassword(
        auth,
        email,
        password
      );

      const response = await fetch(
        `${process.env.REACT_APP_API_URL}/user/${firebaseUser.uid}`
      );
      if (response.ok) {
        const user = await response.json();
        dispatch(loginAction(user));
      }
      return response.status;
    } catch (err) {
      console.log(err);
    }
  };
};
```

Sidebar components



```
const links = useMemo(() => {
  return [
    { icon: Message, label: "Chat", to: PATHS.CHAT },
    { icon: ClipboardList, label: "Group finder", to: PATHS.GROUP_FINDER },
    { icon: ClipboardPlus, label: "Create group", to: PATHS.GROUP_CREATE },
    { icon: User, label: "Profile", to: `~/profile/${user.uid}` },
    { icon: Settings, label: "Profile settings", to: PATHS.PROFILE_EDIT },
  ];
}, [user.uid]);

const mainLinks = links.map((link, index) => (
  <MenuLink key={index} data={link} />
));

return (
  <Navbar.Section className={classes.section}>
    <div className={classes.mainLinks}>{mainLinks}</div>
  </Navbar.Section>
);
```

```
function MenuLink({ data }) {
  const navigate = useNavigate();
  const { label, icon: Icon, to } = data;
  const { classes } = useStyles();

  function handleClick() {
    navigate(to, { replace: true });
  }

  return (
    <UnstyledButton
      key={label}
      className={classes.mainLink}
      onClick={handleClick}>
      <div className={classes.mainLinkInner}>
        <Icon size={25} className={classes.mainLinkIcon} />
        <span>{label}</span>
      </div>
    </UnstyledButton>
  );
}
```



```
function AllGroups() {
  const { classes } = useStyles();
  const { groups } = useSelector((state) => state.groups);

  return (
    <Navbar.Section className={classes.section}>
      <Group className={classes.groupsHeader} position="apart">
        <Text size="s" weight={500} color="dimmed">
          All your groups
        </Text>
      </Group>
      <ScrollArea className={classes.groups} offsetScrollbars>
        {groups.map((group, index) => (
          <GroupLink key={index} data={group} />
        ))}
      </ScrollArea>
    </Navbar.Section>
  );
}
```

```
function GroupLink({ data }) {
  const { name, imgLink, uid } = data;
  const { classes } = useStyles();
  const navigate = useNavigate();
  const dispatch = useDispatch();

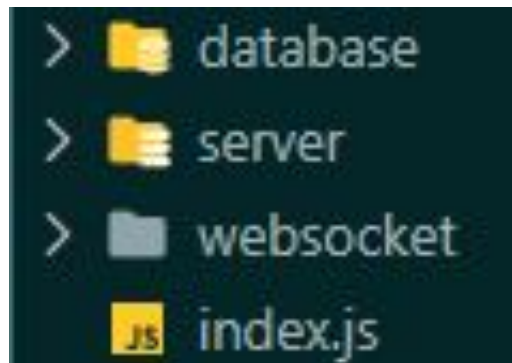
  const handleSelectGroup = () => {
    dispatch(setActiveGroup(data));
    dispatch(setActiveChatGroupAction(uid));
  };

  function handleClick() {
    navigate(PATHS.CHAT, { replace: true });
  }

  return (
    <div style={{ position: "relative" }}>
      <a
        href="/"
        onClick={(e) => {
          e.preventDefault();
          handleSelectGroup();
          handleClick();
        }}
        key={name}
        className={classes.groupLink}>
        <Group>
          <Avatar src={imgLink} radius="xl" />
          {name}

          </* {notifications && (
            <Badge
```


Backend



```
app.use("/user", userRoutes);  
app.use("/group", groupRoutes);
```

```
router.get("/all-groups", getAllGroups);  
router.get("/:idGroup", getGroupInfo);  
  
router.post("/create", createGroupInDatabase);  
router.put("/:idGroup/join", joinGroupInDatabase);  
router.delete("/:idGroup/leave", leaveGroupInDatabase);  
router.get("/:idGroup/messages", getPreviousMessages);
```

```
router.post("/register", register);  
  
router.get("/:id", getProfileInfo);  
router.get("/:id/load-groups", getUserGroups);  
router.put("/:id/set-favourite-group", setFavouriteGroup);  
router.put("/update-profile", updateProfileInfo);
```

```
allUserGroups.forEach(async ({ uid }) => {  
  if (!checkRoomExists(uid, activeGroups)) {  
    await createAndJoinRoom(ws, username, uid, activeGroups);  
  } else if (!checkUserInRoom(uid, username, activeGroups)) {  
    await joinRoom(ws, uid, username, activeGroups);  
  }  
});
```

```
const getProfileInfo = async (req, res) => {  
  const userID = req.params.id;  
  const userInfo = await profileInfo(userID);  
  if (userInfo.status)  
    return res.status(userInfo.status).json(userInfo.message);  
  return res.status(200).json(userInfo);  
};
```