Media-Management-Platform

WT WS24/25

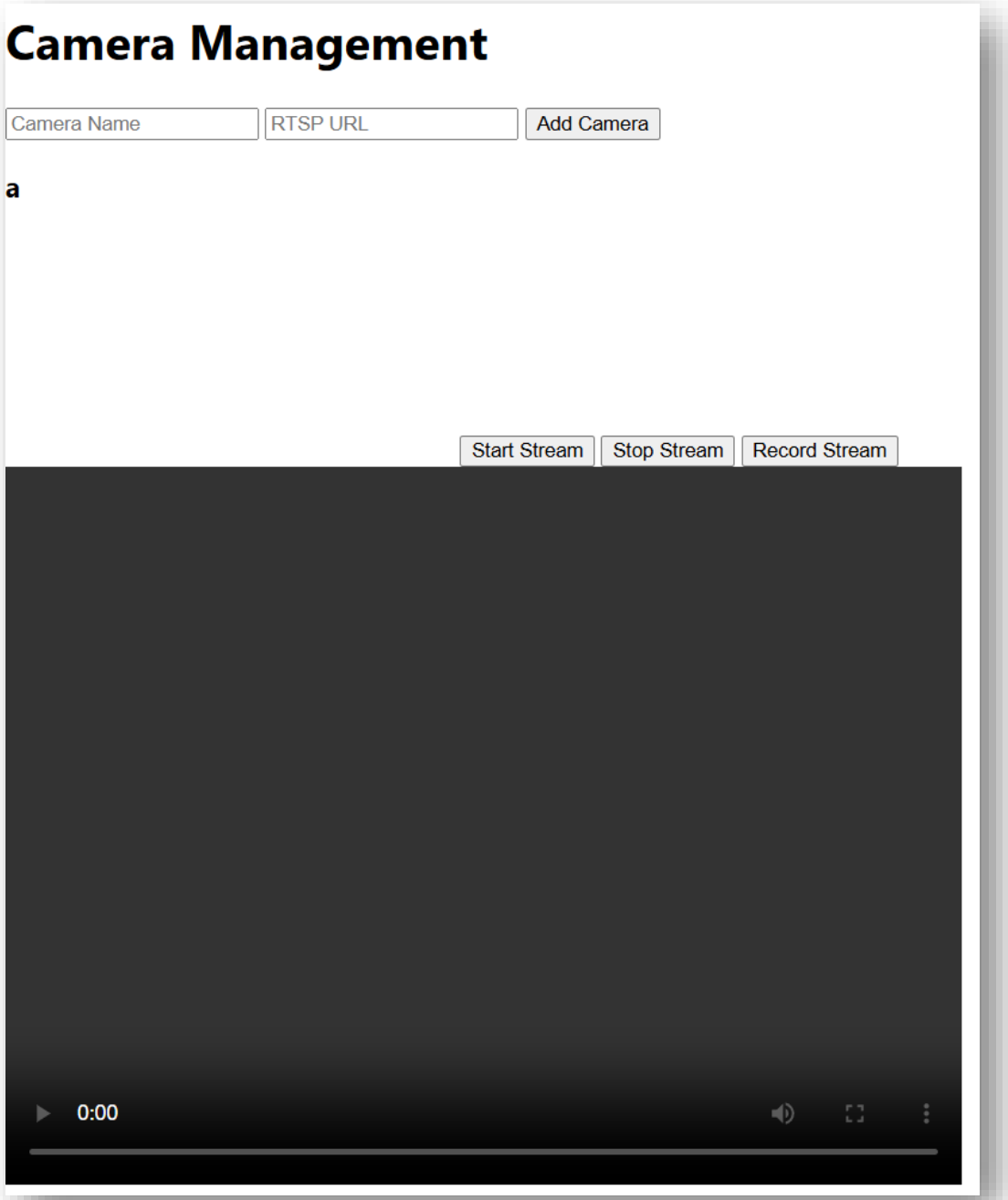
Goals:

Authorization

Goals

- Require user to authenticate

- Show different streams based on user

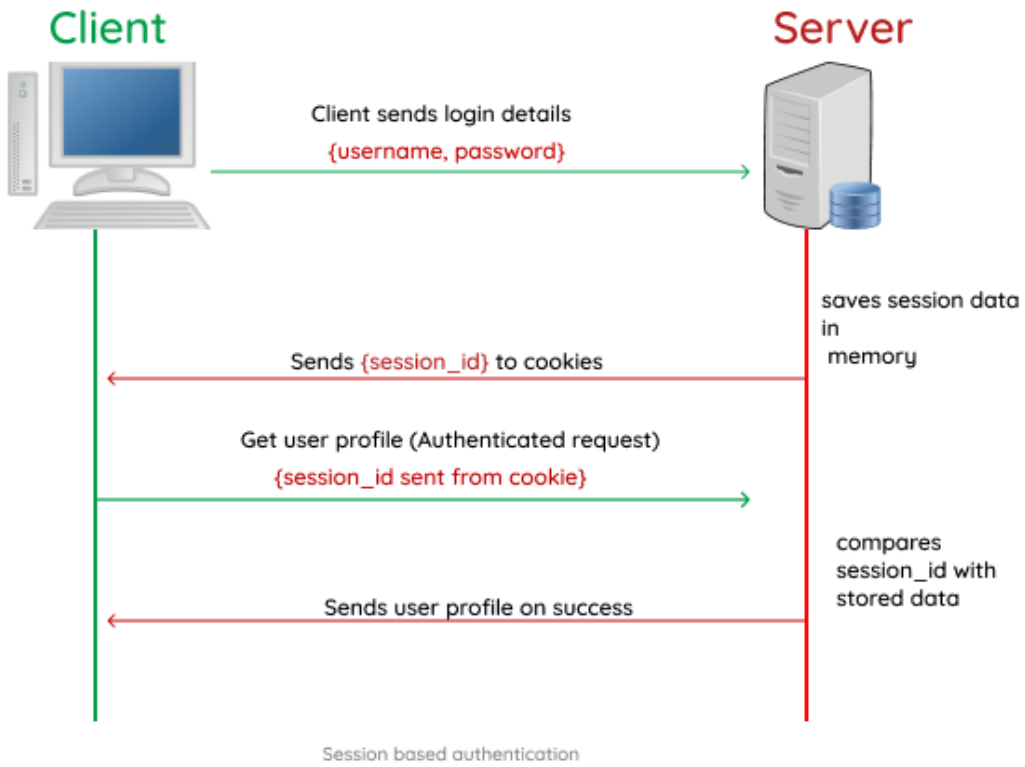


Backend

Authentication

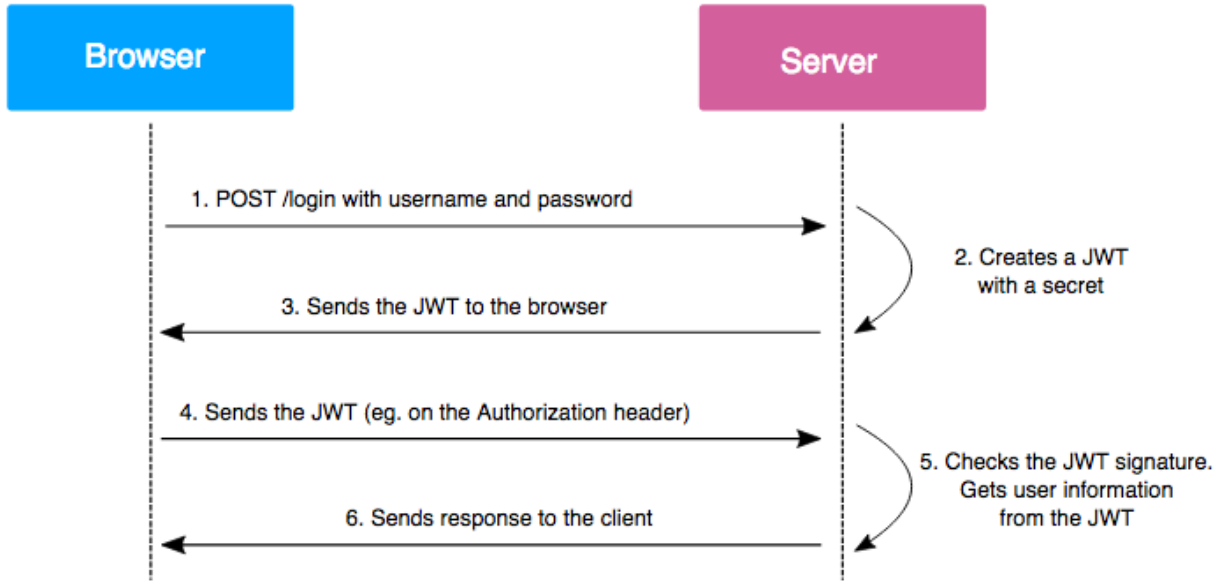
- At first: Session based

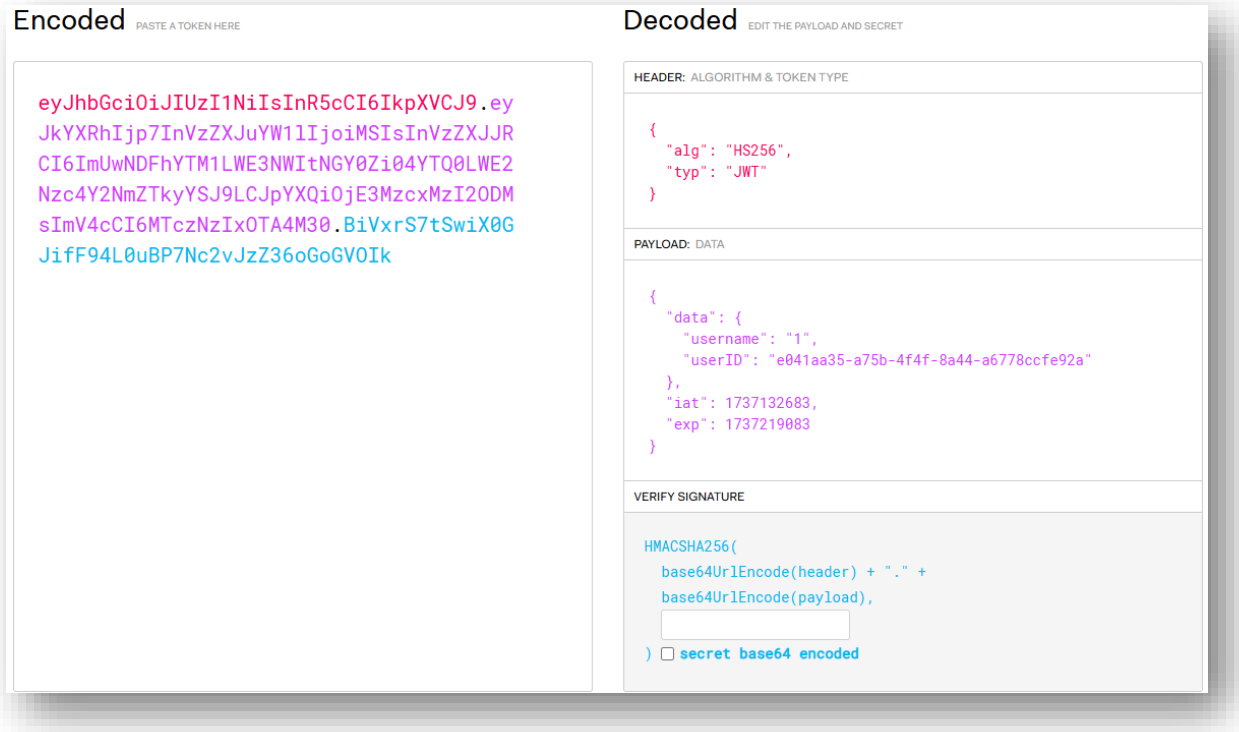
- Too complicated with frontend
  ➔ JWT



Session based authentication

JsonWebToken





JWT Example: /login

```
app.post("/login", async (req, res) => {
  // Check if user exists
  const user = await findUser(req.body.username);
  if (!user) {
    return res.status(401).json({ message: 'Invalid credentials.' });
  }
  try {
    // Check if password is correct
    if (await bcrypt.compare(req.body.password, user.password)) {
      logger.info("Authentication OK");
      const token = jwt.sign(
        {
          data: {username: user.username, userID: user.uuid},
        },
        jwtSecret,
        {
          expiresIn: "24h",
        },
      );
      // Send token to client
      res.status(200).json({ token });
    } else {
      res.status(401).json({ message: 'Invalid credentials.' });
    }
```

Request body:

```
{
  "username": "exampleUser",
  "password": "examplePassword"
}
```

Response body:

```
{
  eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJkYXRhIjp7InVzZXJuYW1
}
```

Passport-JWT

- Strategy for PassportJS
- Authentication middleware
- Returns 401 if JWT is wrong

```
const jwtDecodeOptions = {
  jwtFromRequest: ExtractJwt.fromAuthHeaderAsBearerToken(),
  secretOrKey: jwtSecret,
};
```

```
passport.use(
  new JwtStrategy(jwtDecodeOptions, (payload, done) => {
    const user = findUser(payload.data.username);
    if (user) {
      return done(null, user);
    } else {
      return done(null, false);
    }
  }),
);
```

```
app.get(
  "/self",
  passport.authenticate("jwt", { session: false }),
  (req, res) => {
```

Backend api functionality

Explain frontend

Explain frontend

Explain frontend=>backend