

Experiment 9: Implement Protected Routes with JWT Verification

Code Implementation:

JWT Setup:

```
const jwt = require('jsonwebtoken');
const secretKey = 'yourSecretKey';

// Generate token
function generateToken(user) {
    return jwt.sign(user, secretKey, { expiresIn: '1h' });
}
```

Middleware to Protect Routes:

```
function verifyToken(req, res, next) {
    const token = req.headers['authorization'];
    if (!token) return res.status(401).json({ message: 'Access Denied' });

    try {
        const verified = jwt.verify(token, secretKey);
        req.user = verified;
        next();
    } catch (err) {
        res.status(403).json({ message: 'Invalid Token' });
    }
}
```

Protected Route:

```
app.get('/dashboard', verifyToken, (req, res) => {
    res.json({ message: `Welcome ${req.user.name}` });
});
```