

# Cursor Tools and MCP Servers for moOde Project

## Current Setup

### *MCP Server Configured*

File: `.cursor/mcp.json`

```
{
  "mcpServers": {
    "filesystem": {
      "command": "npx",
      "args": ["-y", "@modelcontextprotocol/server-filesystem", "/Users/andrevollmer/moodeaudio-cursor"]
    }
  }
}
```

Status: ■ Filesystem MCP server enabled

## Available MCP Tools

### *1. Filesystem MCP (■ Active)*

#### Tools available:

- ``mcp_filesystem_read_file`` - Read files
- ``mcp_filesystem_write_file`` - Write files
- ``mcp_filesystem_list_directory`` - List directories
- ``mcp_filesystem_search_files`` - Search for files
- ``mcp_filesystem_get_file_info`` - Get file metadata
- ``mcp_filesystem_create_directory`` - Create directories
- ``mcp_filesystem_move_file`` - Move/rename files

#### Useful for:

- Reading configuration files
- Writing service files
- Searching for specific files
- Managing project structure

### *2. Browser MCP (■ Available)*

#### Tools available:

- ``mcp_cursor-ide-browser_browser_navigate`` - Navigate to URLs
- ``mcp_cursor-ide-browser_browser_snapshot`` - Get page snapshot
- ``mcp_cursor-ide-browser_browser_click`` - Click elements
- ``mcp_cursor-ide-browser_browser_type`` - Type text
- ``mcp_cursor-ide-browser_browser_take_screenshot`` - Take screenshots

#### Useful for:

- Testing moOde Web UI (<http://192.168.10.2>)
- Automating browser tasks
- Taking screenshots of display
- Testing Room Correction Wizard
- Verifying Web UI functionality

# Potential MCP Servers to Add

## 1. *Terminal/SSH MCP*

**Purpose:** Execute commands on Pi remotely

**Could provide:**

- SSH connection to Pi
- Remote command execution
- File transfer
- Service management

**Useful for:**

- Testing fixes on Pi without manual SSH
- Automating deployment
- Checking Pi status
- Running commands remotely

## 2. *Database MCP*

**Purpose:** Access moOde SQLite database

**Could provide:**

- Query moOde database
- Update configuration
- Read settings
- Check system state

**Useful for:**

- Reading moOde configuration
- Updating display settings
- Checking audio configuration
- Verifying system state

## 3. *GitHub MCP*

**Purpose:** Access GitHub repositories

**Could provide:**

- Read GitHub repos
- Check for updates
- Read documentation
- Access issues/PRs

**Useful for:**

- Reading moOde source code
- Checking for updates
- Reading driver documentation
- Accessing forum solutions

# How to Use Current Tools

## *Filesystem MCP*

Already available - I can use these tools to:

- Read files directly (faster than read\_file)

- Write files directly
- Search for files
- List directories

## ***Browser MCP***

Already available - I can use these tools to:

- Navigate to moOde Web UI
- Test functionality
- Take screenshots
- Automate browser tasks

### **Example use case:**

```
# I could navigate to http://192.168.10.2
# Take a screenshot
# Test if Web UI is working
# Automate Room Correction Wizard testing
```

## **Recommendations**

### ***High Priority***

1. **\*\*Use Browser MCP\*\*** - Test moOde Web UI automatically
2. **\*\*Use Filesystem MCP\*\*** - Faster file operations

### ***Medium Priority***

3. **\*\*Add Terminal/SSH MCP\*\*** - Remote Pi access
4. **\*\*Add Database MCP\*\*** - moOde database access

### ***Low Priority***

5. **\*\*Add GitHub MCP\*\*** - Repository access (we have local clones)

## **Current Capabilities**

### **What I can do NOW:**

- ■ Read/write files via MCP (faster)
- ■ Navigate and test moOde Web UI via browser
- ■ Take screenshots of Web UI
- ■ Automate browser tasks
- ■ Search files efficiently

### **What would be useful:**

- ■ SSH to Pi automatically
- ■ Query moOde database
- ■ Execute commands on Pi remotely

## **Next Steps**

1. **\*\*Use Browser MCP\*\*** to test moOde Web UI
2. **\*\*Use Filesystem MCP\*\*** for faster file operations
3. **\*\*Consider adding\*\*** Terminal/SSH MCP for Pi access

4. **\*\*Consider adding\*\*** Database MCP for moOde config access