

Building with Claude Code

Office Betting Demo

Claude Code

From idea to deployed app in one session

Important Notice

The company has not yet released an AI policy permitting the use of Claude Code for work purposes.

Please use personal time and resources only for any experimentation with this tool.

Today's agenda:

1. What is Claude Code?
2. Live demo: Office Betting Platform
3. How it was built
4. Running the project

What is Claude Code?

A CLI tool that brings Claude AI directly into your terminal

Key features:

- Reads and writes files in your codebase
- Runs shell commands
- Understands your entire project context
- Works with any language or framework

You describe what you want



Claude writes the code



You review and iterate

Getting Started Resources

■ We have two companion tutorials!

1. Getting Started with Claude Code

`getting-started-claude-code.md`

- Subscribing to Claude Pro/Max
- Installation on Mac and Windows
- Authentication setup

2. Claude Code Tutorial

`claude-code-tutorial.md`

- Commands and workflows
- Planning mode, permissions
- Context management, MCP servers
- Tips and best practices

Live Demo: Office Betting

■ What we built in one session

A pari-mutuel betting platform with:

- FastAPI backend (Python 3.12)
- React + TypeScript frontend
- SQLite database
- JWT authentication
- Docker Compose deployment

One prompt to start:

```
"Build a complete web application for an office  
play-money betting platform using pari-mutuel betting"
```

Project Structure

```
office-betting/  
├── backend/  
│   ├── src/mirustech/betting/  
│   │   ├── main.py           # FastAPI app  
│   │   ├── models/          # SQLAlchemy models  
│   │   ├── routers/         # API endpoints  
│   │   └── services/        # Business logic  
│   └── Dockerfile  
├── frontend/  
│   ├── src/  
│   │   ├── pages/           # React pages  
│   │   └── components/      # UI components  
│   └── Dockerfile  
└── docker-compose.yml
```

All generated by Claude Code!

Key Features Built

■ Pari-mutuel betting logic

```
def calculate_payout(wager, winning_outcome,
                    total_pool):
    user_weighted = wager.amount * wager.weight
    return (user_weighted /
            winning_outcome.weighted_total)
            * total_pool
```

■ Early bet bonus (1.2x weight)

```
def calculate_weight(bet, wager_time):
    total_window = bet.close_time - bet.created_at
    halfway = bet.created_at + (total_window / 2)
    return 1.2 if wager_time < halfway else 1.0
```

Running Locally

Quick start (without Docker)

```
# Backend
cd backend
uv venv && uv pip install -e .
source .venv/bin/activate
python -m mirustech.betting.seed # Load demo data
uvicorn mirustech.betting.main:app --port 8000

# Frontend (new terminal)
cd frontend
npm install && npm run dev
```

Open in browser

```
http://localhost:5173
```

Demo accounts: [demo](#) / [demo](#)

Docker Deployment

One command startup

```
docker-compose up --build
```

What it does

1. Builds backend image (Python + FastAPI)
2. Builds frontend image (Node + Nginx)
3. Creates SQLite volume for persistence
4. Seeds demo data automatically

Access the app

```
http://localhost:3000
```

Takeaways

■ Claude Code enables:

- Rapid prototyping - Full stack app in hours, not days
- Best practices - Follows your coding standards
- Iterative development - Fix issues conversationally
- Learning - See how experienced code is structured

Next Steps

■ Want to try Claude Code yourself?

Step 1: Review the tutorials

```
presenterm getting-started-claude-code.md  
presenterm claude-code-tutorial.md
```

Step 2: Get a Claude Pro or Max subscription

Visit: <https://claude.ai>

Step 3: Install and start experimenting!

Remember: Personal time and resources only
until company AI policy is released.

Questions?