

# GitHub Spec Kit Training - Quick Start Guide

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## Get Started in 5 Minutes

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**For:** Jarvis Richardson, CAIO, hanax-ai

**Goal:** Begin intensive 5-7 day GitHub Spec Kit training immediately

**Target:** 80% autonomous proficiency + teaching capability

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## Immediate Next Steps

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### Step 1: Validate Your Environment (5 minutes)

**On Windows 11 PC:**

```
# Open WSL2/Ubuntu terminal
cd /home/ubuntu/github_spec_training
./validate_environment.sh
```

**On DevOps Server:**

```
# SSH to your DevOps server
ssh username@your-devops-server.hx-infrastructure.com
cd /home/ubuntu/github_spec_training
./validate_environment.sh
```

**Expected Result:** All checks pass, ready to begin training

### Step 2: Begin Day 1 Training (Immediately)

```
# Start Day 1 Foundation Training
cd curriculum
cat day1_foundation.md

# Follow the structured 6-8 hour curriculum
# Complete all validation checkpoints
# Document your progress and learnings
```

### Step 3: Track Your Progress

**Daily Validation:**

- Complete all exercises in `exercises/progressive_exercises.md`
- Validate proficiency using `exercises/validation_checkpoints.md`
- Document learnings for future teaching

**Success Metrics:**

- Day 1: 60-70% proficiency (foundation skills)
- Day 2: 70-80% proficiency (intermediate application)
- Day 3: 80%+ proficiency (advanced techniques)

- Day 4: 85%+ proficiency (expert-level projects)
  - Day 5: 85%+ proficiency + teaching capability
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## Training Program Structure

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### Day 1: Foundation & Setup Mastery

- Environment validation and GitHub Spec Kit installation
- SDD methodology fundamentals (Specify, Plan, Tasks, Implement)
- First complete project with HX-Infrastructure integration
- **Target:** 60-70% proficiency in foundation skills

### Day 2: Intermediate Application with Archive Integration

- HX-Infrastructure archive analysis and pattern extraction
- Real-world project specification and implementation
- Advanced planning with complex integration requirements
- **Target:** 70-80% proficiency in intermediate skills

### Day 3: Advanced Techniques and Optimization

- Advanced Spec Kit features and workflow optimization
- Complex scenario handling and edge case management
- Performance optimization and advanced integration patterns
- **Target:** 80%+ proficiency in advanced skills

### Day 4: Complex Project Application and Troubleshooting

- Enterprise-grade project execution from start to finish
- Advanced troubleshooting and crisis management
- Production-ready solution development
- **Target:** 85%+ proficiency in expert-level skills

### Day 5: Expert-Level Proficiency and Teaching Preparation

- Comprehensive mastery validation and certification
  - Teaching curriculum and material development
  - Innovation and continuous improvement demonstration
  - **Target:** 85%+ proficiency + qualified instructor certification
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## Success Criteria

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### Technical Mastery (80%+ Required):

- [ ] Can initialize and configure GitHub Spec Kit projects independently
- [ ] Demonstrates mastery of all four SDD phases
- [ ] Successfully integrates AI agents with Spec Kit
- [ ] Applies spec-driven methodology to real HX-Infrastructure scenarios
- [ ] Troubleshoots common issues without external assistance
- [ ] Creates comprehensive specifications for complex projects

- [ ] Optimizes workflows for efficiency and quality

## Teaching Capability (70%+ Required):

- [ ] Can explain SDD concepts clearly to beginners
- [ ] Demonstrates practical exercises effectively
- [ ] Provides constructive feedback on student work
- [ ] Adapts teaching approach to different learning styles
- [ ] Creates assessment criteria and validates proficiency
- [ ] Troubleshoots student environment issues
- [ ] Maintains updated curriculum and materials

## If You Encounter Issues

### Environment Problems:

```
# Get installation help
./validate_environment.sh --install-help

# Check troubleshooting guides
cat environment_setup/windows11_setup.md
cat environment_setup/devops_server_setup.md
```

### Training Questions:

- Review `teaching_materials/instructor_guide.md` for detailed guidance
- Check `exercises/validation_checkpoints.md` for assessment criteria
- Use `archive_integration/integration_strategy.md` for HX-Infrastructure context

### Technical Support:

- All materials are self-contained and comprehensive
- Troubleshooting guides included for common issues
- Progressive exercises build skills systematically
- Validation checkpoints ensure consistent progress

## Daily Schedule Recommendation

### Intensive Schedule (Recommended):

- **Morning (3-4 hours):** Core curriculum and new concepts
- **Afternoon (3-4 hours):** Hands-on exercises and implementation
- **Evening (1-2 hours):** Validation, documentation, and preparation

### Flexible Schedule (Alternative):

- **Spread over 7 days:** 5-6 hours per day
- **Weekend intensive:** 2 full days + 3 half days
- **Part-time:** 2-3 hours daily over 10-14 days

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## Certification Levels

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Upon completion, you'll achieve one of these certification levels:

### **Certified SDD Practitioner (80-84% proficiency):**

- Can work independently on most SDD projects
- Demonstrates solid understanding of methodology
- Produces professional-quality work consistently
- Can mentor beginners with guidance

### **Certified SDD Expert (85-89% proficiency):**

- Handles complex scenarios with confidence
- Demonstrates advanced optimization techniques
- Can teach and mentor others effectively
- Contributes to process improvement and innovation

### **Certified SDD Master (90%+ proficiency):**

- Masters all aspects of SDD methodology
- Demonstrates thought leadership and innovation
- Can design and deliver comprehensive training programs
- Drives adoption and excellence across organizations

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## Ready to Begin?

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**Your intensive GitHub Spec Kit training journey starts now!**

1. **Validate Environment:** `./validate_environment.sh`
2. **Start Day 1:** `cd curriculum && cat day1_foundation.md`
3. **Track Progress:** Use validation checkpoints daily
4. **Document Learnings:** Prepare for teaching others
5. **Achieve Mastery:** 80%+ proficiency in 5-7 days

**Remember:** This is an intensive program designed for rapid skill acquisition. Stay focused, practice consistently, and don't hesitate to revisit concepts as needed.

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**Good luck with your training! You've got this! 🍀**

Created for Jarvis Richardson, CAIO, hanax-ai

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