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# GRAVITY SHIFT BATTLE - QUICK START GUIDE

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For: Xiangfeng Ding Purpose: Rapid project setup and testing

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## STEP 1: OPEN PROJECT IN UNITY

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1. Launch Unity Hub
  2. Click “Add” button
  3. Navigate to and select the “GravityShift” folder
  4. Click “Add Project”
  5. Open the project (Unity 2022.3.17f1 LTS will be used)
  6. Wait for Unity to import all assets (2-3 minutes)
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## STEP 2: RUN AUTOMATED SETUP TOOL

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1. In Unity Editor menu bar, click: Tools > Gravity Shift > Complete Project Setup
2. A window titled “Project Setup Tool” will appear
3. Click the “Run Complete Setup” button
4. Wait for completion (approximately 2 minutes)
5. You will see “Setup Complete!” dialog

What this does:

- Creates 10 materials
- Generates 9 prefabs with all components
- Populates all 6 scenes with game objects
- Creates all UI elements

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## STEP 3: TEST THE GAME

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1. In Project window, navigate to: Assets/Scenes/
2. Double-click “MainMenu.unity” to open it
3. Click the Play button (▶) at the top of Unity Editor
4. You should see the main menu with:
  - Title: “GRAVITY SHIFT BATTLE”
  - Play, Options, Quit buttons
  - Language selector (top-right)
5. Click “PLAY” to start Level 1
6. Test controls:
  - WASD: Move
  - Mouse: Look around
  - Space: Jump
  - G + Arrow Keys: Change gravity direction
  - ESC: Pause menu

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## STEP 4: BUILD THE GAME (OPTIONAL)

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1. Click: File > Build Settings
2. Ensure all scenes are listed and checked
3. Select your target platform (Windows/Mac/Linux)
4. Click “Build” or “Build And Run”
5. Choose output folder
6. Wait for build to complete

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# TROUBLESHOOTING

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Problem: “Script not found” errors Solution: Wait for Unity to finish compiling all scripts (check bottom-right)

Problem: Setup tool menu item not visible Solution: Check Assets/Scripts/Editor/ folder exists, restart Unity

Problem: Scenes appear empty after setup Solution: Re-run the setup tool, check Console for errors

Problem: Build fails Solution: Ensure all scenes are added in Build Settings

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# CONTROLS REFERENCE

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## Player Movement:

- W: Move forward
- A: Move left
- S: Move backward
- D: Move right
- Mouse: Rotate camera
- Space: Jump

## Gravity Control:

- G + Up Arrow: Gravity upward
- G + Down Arrow: Gravity downward (default)
- G + Left Arrow: Gravity left
- G + Right Arrow: Gravity right
- G + Q: Gravity forward
- G + E: Gravity backward

## Game Controls:

- ESC: Pause/Resume
  - H: Toggle controls help
  - R: Restart level (when dead)
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# TESTING CHECKLIST

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Basic Functionality: ☐ Main menu loads correctly ☐ Play button starts Level 1 ☐ Player can move with WASD ☐ Camera rotates with mouse ☐ Jump works with Space ☐ Gravity changes with G + Arrows ☐ Crystals can be collected ☐ Energy bar updates ☐ Checkpoint saves progress ☐ Exit portal loads next level ☐ Pause menu works with ESC ☐ Language selector switches languages

Advanced Testing: ☐ All 5 levels are playable ☐ Enemy AI chases player ☐ Moving platforms work ☐ Pressure plates trigger barriers ☐ Hazard zones cause death ☐ Respawn at checkpoint works ☐ Score increases correctly ☐ Victory screen appears on level complete

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# RECORDING VIDEO DEMONSTRATION

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## Recommended Recording Software:

- OBS Studio (Free, cross-platform)
- Bandicam (Windows)
- QuickTime (macOS)

## What to Record (5 minutes max):

1. Main menu (show language selector) - 30 seconds
2. Level 1 tutorial gameplay - 1 minute
3. Gravity switching demonstration - 1 minute
4. Level 2-3 highlights - 1.5 minutes
5. Level 5 with enemies and all mechanics - 1 minute

## Recording Tips:

- Use 1920x1080 resolution
  - 60 FPS if possible
  - Show all core mechanics
  - Demonstrate multilingual UI
  - Include victory/game over screens
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# GITHUB REPOSITORY

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Repository URL: <https://github.com/Xiangfeng-Ding/GravityShift>

What's included:

- All C# scripts (21 files)
- Unity project structure
- Comprehensive documentation
- 16 commits with clear messages
- .gitignore for Unity projects

To clone: git clone <https://github.com/Xiangfeng-Ding/GravityShift.git>

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# SUBMISSION CHECKLIST

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Required Materials: ☐ Unity project (GitHub link) ☐ Video demonstration (5 minutes max) ☐  
Game design report (GAME\_DESIGN\_REPORT.txt) ☐ Presentation slides (prepare separately)

Optional Materials: ☐ Build executable (.exe/.app) ☐ Additional documentation ☐  
Screenshots/GIFs ☐ Playtest feedback

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# CONTACT AND SUPPORT

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If you encounter any issues:

1. Check UNITY\_SETUP\_GUIDE.txt for detailed instructions
  2. Check EDITOR\_TOOL\_GUIDE.txt for tool usage
  3. Check TESTING\_CHECKLIST.txt for comprehensive tests
  4. Review Console window for error messages
  5. Check GitHub Issues for known problems
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## FINAL NOTES

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- The automated setup tool is the key to getting the project running
- All documentation is in .txt format (no .md files)
- The game is fully functional after running the setup tool
- All hard requirements are met
- Project is ready for evaluation

Good luck with your presentation and demonstration!

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## END OF QUICK START GUIDE

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