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Oregon Game Project Challenge Coach Workshop

Presented by: Your Name

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Agenda

- 2011 Season Overview
- OGPC Mission
- Forming Your Team
- Registering Your Team
- Equipping Your Team
- Managing Your Team
- Tournament Judging
- Contact Information

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2011 Season Overview

- December 13, 2010: Theme Announced
- January 10, 2011 - Registration Opens
  - Register online: http://techstart.org/ogpc
  - Registration fee: $50
- March 14, 2011: Registration Closes
- March 1 through April 1, 2011
  Game Concept Document Accepted
- April 30, 2011 – Tournament at Chemeketa CC

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OGPC Mission

- OGPC is not just about programming a game and competing in tournaments

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OGPC Mission

- Teach General Life Skills
  - Project Planning
  - Time Management
  - Teamwork
  - Cooperation
  - Communication
  - Responsibility

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OGPC Mission

- Teach Specific Technical Skills
  - Program Planning
  - Design
  - Coding
  - Testing
  - Creating Sprites
  - Creating Sound Effects
  - Documentation

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OGPC Mission

- Show How Much FUN a Team Project Can Be!!
  - Allow some social time along with the work time
- Team Members Do the Work – It is THEIR Project
  - Each member has roles and responsibilities
- Open their minds to the possibility of a technical career choice
  - A project like this can change a life choice

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Forming Your Team

- How many members do you need?
- Difference between the coach and the mentors
- Where will you meet?
- Other adults to work with the team
- Ethics
- General Advice

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Forming Your Team

How many members do you need?

- High initial interest may fade
- Eventually team must stabilize at 4-7 team members at either the high school level or 4-7 members at middle school level.
  - Note: Mixed teams must register as high school teams
- 4 students may be the "ideal"
- Sub-groups of 1-2 students can work in parallel
  - Research the theme
  - Learn programming techniques
  - Develop graphics
  - Develop sound effects
  - Prototype a game with "place-holder" sprites
  - Work on the presentation

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Forming Your Team

Adult team members: Coach and Mentors

- Coach – The person in charge
  - Organizes the team
  - Does not need to be a techie
- Mentors – The technical gurus
  - Provides technical advice
  - Provides the technical basics
- One person can play both roles

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Forming Your Team
Coach – the person in charge

- Single point of contact for team
- Understands the ogpc program
- Management expertise more important than technical expertise
  - Recruits the team
  - Registers the team
  - Arranges for equipment
  - Schedules meetings
  - Sets the philosophy and instills team spirit
  - Is a good role model

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Forming Your Team
Mentors: The Technical Gurus

- Technical Advisor to assist the coach
- Teaches game programming design
- Helps set achievable goals
- Encourages structured problem solving
  - Follow typical engineering project models
  - Experiment with one variable at a time
- A mentor could be you, a colleague, parent, a high school or college student, an occasional visitor

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Forming Your Team
Team Ethics

- We are a team
- We do the work to find the solutions with <u>guidance</u> from our coaches and mentors.
- We honor the spirit of friendly competition
- What we discover is more important than what we win
- We share our experiences with others
- We display gracious professionalism in everything we do
- We have fun

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Forming Your Team
General Advice to all Adults

- This is the students' project, not yours
- Be a good role model
- Keep a positive attitude
- Encourage teamwork and insist on mutual respect
- Don't over emphasize "winning" – demonstrating a solution at a tournament is success
- Encourage the process, not just the finished product
  - Teams should still attend even if parts of the game are not finished.
- Help kids keep project in scope of the short season – they will have more ideas than time!
- Have fun

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Registering Your Team

- All registration and support documents will be posted at http://techstart.org/ogpc

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Registering Your Team

- Opens: January 10, 2011
- Closes: March 14, 2011
- Web address: http://techstart.org/ogpc
- $50 registration fee
- First-Come-First-Served, so REGISTER EARLY!!

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Equipping Your Team

- What resources do you need to get started?
- Software Warnings
- Example budget
- Possible sources of funding

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Equipping Your Team
Choosing the Track

- Two tracks available
  - Open (any platform, program for any device)
  - Game Maker

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Equipping Your Team
Resources to get you started

- A copy of Game Maker 7 or 8 – or your chosen software for Open Division
- Game Maker Free Edition (http://yoyogames.com/gamemaker); Pro Edition ($25)
- Other software Platform (price will vary)
- A laptop computer (teams should bring this to the competition)
- Game Maker requires Windows XP, Vista, or 7
- A place to meet and work (Classroom, Family room, Garage, Community Room)

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Equipping Your Team
Software Warnings

- School security may not game development tools to be installed or run on school equipment
  - Consider using personal laptops
  - Game Maker runs nicely from a Flash drive
  - Provide a way to share work
    - Flash drives, email, Google docs etc
  - Teach kids to save versions as they go
  - Backup progressive versions to a safe place
- Teach about copyright laws regarding sprites, photos, code, etc.

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Equipping Your Team
Example Team Budget

- Registration Fee: $50
- Game Maker: $0 (Lite) or $25 (Pro) or Other Software Cost for Open Track
- Transportation: _____
- Total: _____
- Extras: team shirts, snacks, etc

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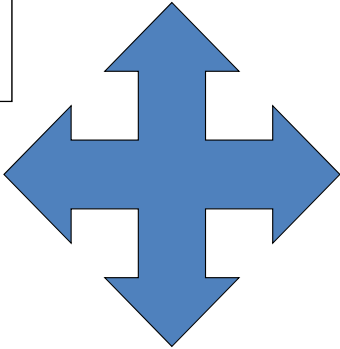Education Foundation

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Equipping Your Team
Possible Sources of Funding

Having some portion of costs picked up by team members gives a sense of commitment

Fundraising Activities

Team Sponsors

TechStart Scholarship

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Managing Your Team

- Organize Your Team Meetings
- Team Kick-Off Meeting
- Parent Involvement
- Getting Started with Team Members
- Learning Opportunities
- Software Development Cycle
- Making Progress

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Managing Your Team
Organizing Your Team Meetings

- How often and how long to meet
  - Most teams meet 2-3 times per week
  - After school, evenings, weekends as team desires
  - Some add extra time as they get closer to end
    - > 1 hr (set up and take down)
    - < 3 hrs (attention span)
- At least 2 adults present during meetings – can use parents who take turns
- Set ground rules -- e.g. Don't have kids walk home by themselves after dark, cell phones during meetings,…
- Refreshments / snacks

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Managing Your Team
Team Kick-Off Meeting

- Consider inviting parents
- Set expectations with both
  - Goals
  - Season
  - Milestones
  - Time Commitment
  - Team Commitment
- Explain the real situation to the parents

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Managing Your Team
Parent Involvement

- Explain program/philosophy
- Explain team rules
- Discuss participation commitment for team members
- Review costs and funding sources
- Communicate about tournament
- Solicit help – Roles for parents
  - Car Pooling
  - Snacks
  - Coordinate Fund Raising
  - Publicity
  - End of Season Party

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Managing Your Team
Getting Started with Team Members

- Set Team Goals
- Decide responsibilities
  - Can rotate, especially near beginning
  - Usually will want to be fixed as near tournament
  - Need backup roles due to absences
- Set milestones – use project management analogy
  - Set dates for each phase of project to keep on track
  - Include design, build, test, REWORK
- Encourage participation in a team environment

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Managing Your Team
Learning Opportunities

- Encourage risk taking
  - "If you never fail, you never tried anything new." Albert Einstein
  - Key is to manage the risk
- Encourage experimentation
- Expect failure – focus on what is learned as a result
- Problem solving takes time – Edison tried thousands of different materials to come up with the light bulb filament
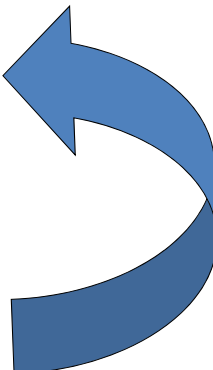
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Managing Your Team
Software Development Cycle

- Defining problem
- Brainstorming
- Evaluating alternatives
- Choosing alternative
- Implementing
- Evaluating & testing

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Managing Your Team
Making Progress

- Skill Builders or Templates
- Simple Games to focus on a Concept
  - Examples found in free on-line tutorials
- Learning Exercises
  - Motion Control
  - Collisions
  - Game Flow
  - Levels of Difficulty

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Managing Your Team

Making Progress

- Build a Foundation
- Introduce techniques and concepts
  - Build or bring demos
  - Discuss advantages and disadvantages
  - Let kids figure out how to apply concept to Challenge
- If meetings start before Challenge is announced, can use mini-challenges to introduce concepts
- One approach: use 5-10 minutes at start of each meeting to introduce concepts

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Managing Your Team

Making Progress

- Sample Concepts
  - Use of a theme
  - Game Flow
  - Consistency and Variation
  - Scoring System
  - Use of Animations
  - Graphics
  - Testing
  - Documentation

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Managing Your Team

Making Progress

- Hard Skills
  - Mechanical Design
  - Programming
  - Software Design
  - Analysis
  - Problem Solving
  - Experimentation
  - Documentation
  - Computer Graphics
  - Testing
  - Human Interface
- Soft Skills
  - Timeliness
  - Teamwork
  - Tact and Compromise
  - Confidence
  - Courtesy
  - Perseverance
  - Planning
  - Positive Attitude

Turn these youths into engineers!!

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Managing Your Team

Making Progress

Divide and Conquer - Examples

- Game Designer
- Graphics & sounds
- Testing
- Marketing (Presentations)

- Rooms
- Levels
- Scoring
- Research

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Tournament Judging

Prepare Your Team for the Tournament Judging

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Tournament Judging

Many Awards Your Team Can Win

- Champion
- Game Experience
- Game R&D
- Presentation
- Programming
- Teamwork
- Rookie Team Award
- and more……

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Tournament Judging

Team Performance Judging Interview

Presentation & Teamwork Award

– Engineering requires Research skills and presentation skills

• (remember the marketing kid? ☺)

"The Bizness"

2nd Place
Teamwork Award

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Tournament Judging
Technical Judging Interview

Programming Award
Game Research & Development Award
Game Experience Award

• Panel of "experts" interviews teams
• Prepare the team by:
   – Encourage ALL members to participate in presentation responsibilities.
   – Practice speaking in front of a group
   – Learn how to listen to "judges" questions and respond or pass them off to a teammate
   – Focus the presentation on how the game meets the requirements of the challenge
   – Personalize the presentation

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Tournament Judging
Our Mailing Lists

- OGPC Interest List
  - All volunteers – you can opt out
  - We add you when you express interest
- OGPC Coaches List
  - Coaches and mentors are added when you register your team
  - Communication from OGPC to registered coaches – very important channel!

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Tournament Judging
Next Steps

- Get on the ogpc interest list by sending an email to ogpc@techstart.org
- Register your team during Winter 2010
- Start recruiting your team
- Download the free version from http:www.yoyogames.com/gamemaker (or use software of your choice in open division)
  - Start playing with tutorials from that site

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Tournament Judging
Everybody Leaves a Winner

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Contact Information

- Email: ogpc@techstart.org
- Phone: (503) 228-5440
- Web: http://techstart.org/ogpc

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