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Lecture 11:

Level Design

Today

- Administrivia
- Lecture on level design
- Group time and consultations

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Design Documents Graded

- Out of 36 points
  - 4 points per section: Vision, Objectives, Challenges, Interactions, Mockup, Feature List, Plan, Playtesting
- Revisions allowed – resubmit it to me

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Next Week

- Oct 7th
  - 1st prototype due
    - Submit SWF through CMS
  - **In class**: playtesting
    - Bring multiple computers
- Oct 9th
  - **In class**: postmortem presentations
- ***You need to be in class all of next week***

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Prototype Grading

- First Prototype: Oct. 7th
  - Out of 5 points
    - 5 – playable
    - 4 – playable but some crucial components don't work
    - 3 or lower – unplayable; multiple components are missing
- Second Prototype: Oct 21st
  - Out of 100 points
  - Each group gets a customized rubric
  - Rubric will be distributed Oct 8th
  - You can submit a counterproposal by next Friday, Oct. 10th

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Change to First Prototype

- Only three levels required
  - Easy
  - Medium
  - Hard

Policy on crashes

- First Prototype
  - It's okay but will annoy your playtesters
- Second Prototype
  - Acceptable in rare circumstances
- Releases
  - Unacceptable!

Level Design

The Level Designer's Dilemma

- Greatest game idea ever!
- Now what?

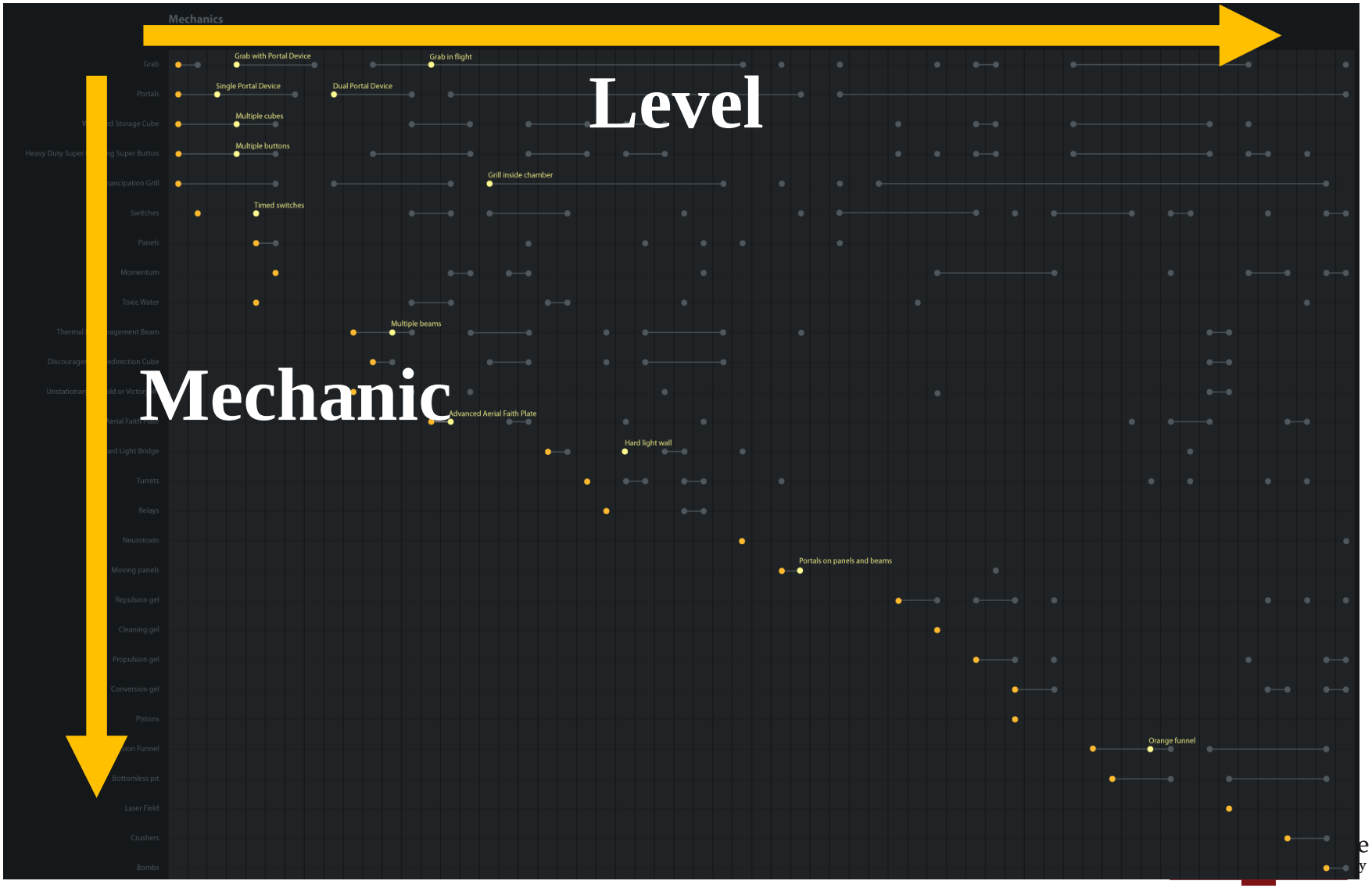
Show off the design!

Three Key Ideas

- Progress through mechanics
- Explore the design space
- Implement design patterns

- Progress through mechanics
- Explore the design space
- Implement design patterns

Portal 2 Mechanics



Mechanics
Introduction
Variation
Grab
Portals
Weighted Storage Cube
Heavy Duty Super Colliding Super Button
Emancipation Grill
Switches
Panels
Momentum
Toxic Water
Thermal Discouragement Beam
Discouragement Redirection Cube
Unstationary Scaffold or Victory lift
Grab with Portal Device
Grab in flight
Single Portal Device
Dual Portal Device
Multiple cubes
Multiple buttons
Timed switches
Multiple beams
New Mechanics
Recombination

Reinforcement

- How long to "dwell" on a mechanic before introducing a new one?

<u>Actions:</u>

A = jump **B = dash**

A B **vs.** **A A A B**

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Recombination

- How often to combine mechanics with other mechanics?

<u>Actions:</u>

A = jump **B = dash** **C = shoot fireball**

A B C vs. A AB ABC

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Reinforcement

A, A, A,
B, B, B

A, A, B,
B, AB, AB

A, B, C, D, E

A, AB, ABC,
ABCD, ABCDE

Recombination

Robot Unicorn Attack

Robot Unicorn Attack Progression

Mechanics:

A = jump **B = dash**

A A A B A A B

High reinforcement, low recombination

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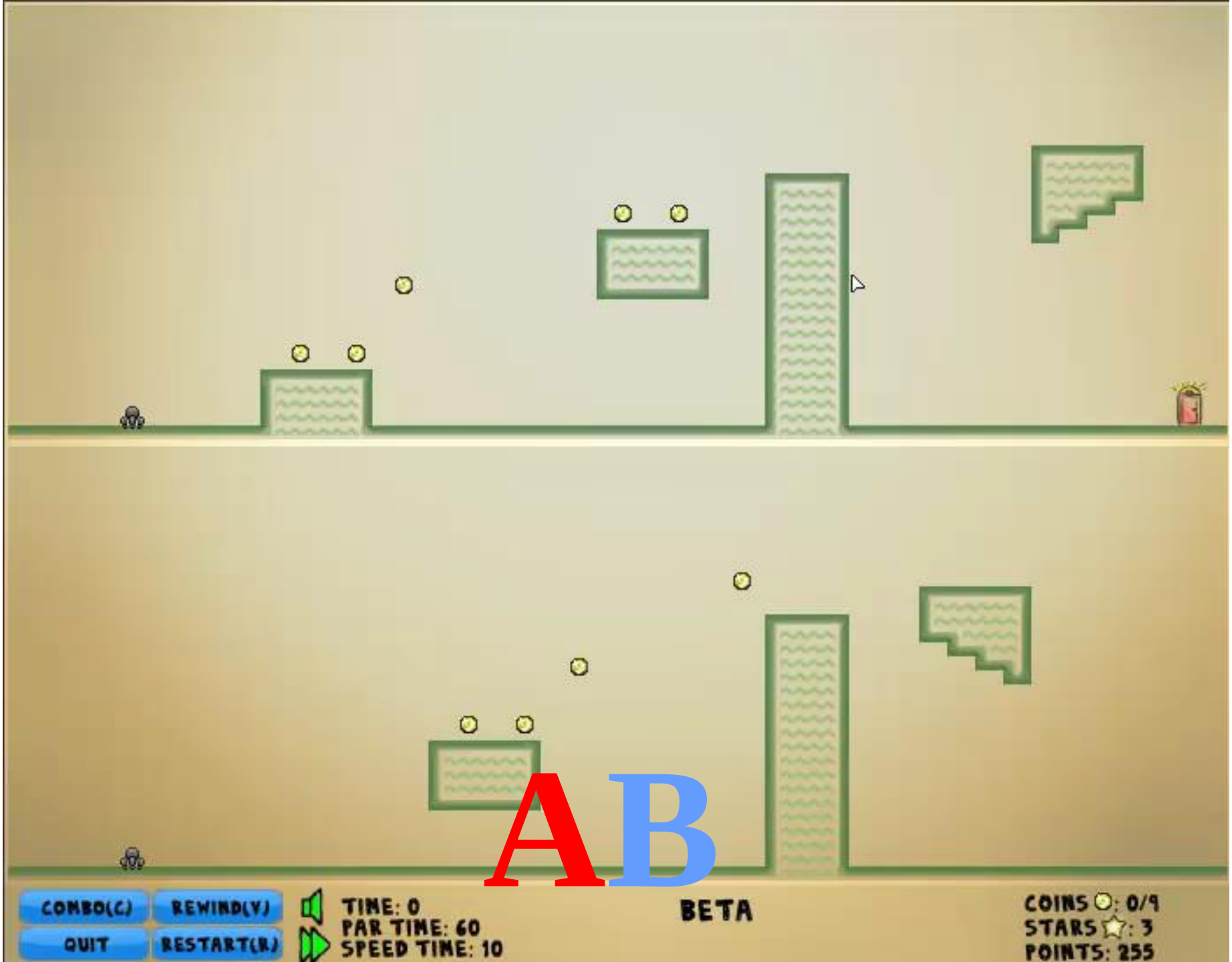
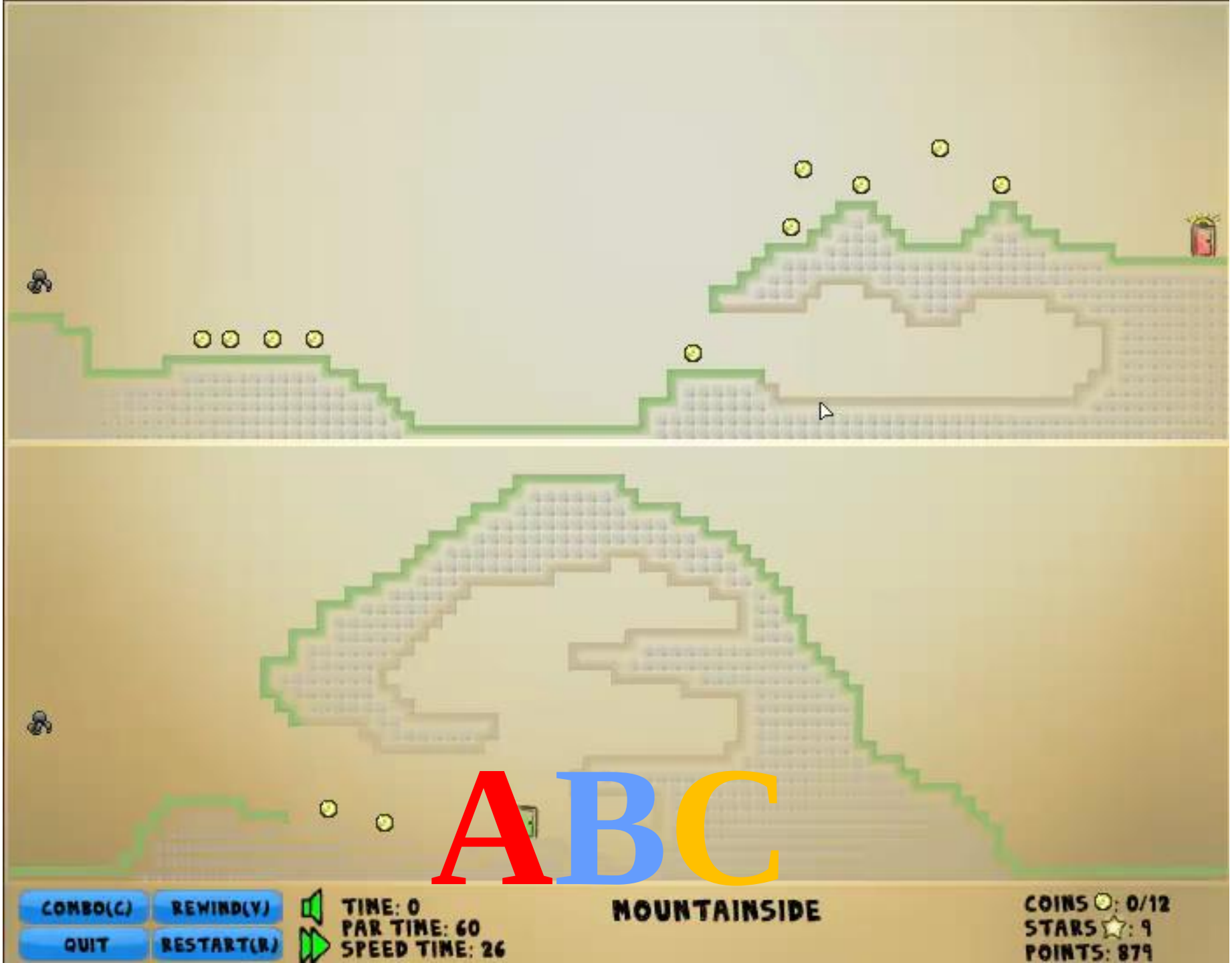
Hello Worlds!
A
COMBO(C)
REWIND(V)
QUIT
RESTART(R)
TIME: 1
PAR TIME: 45
SPEED TIME: 12
ALPHA
COINS: 0/6
STARS: 0
POINTS: 0

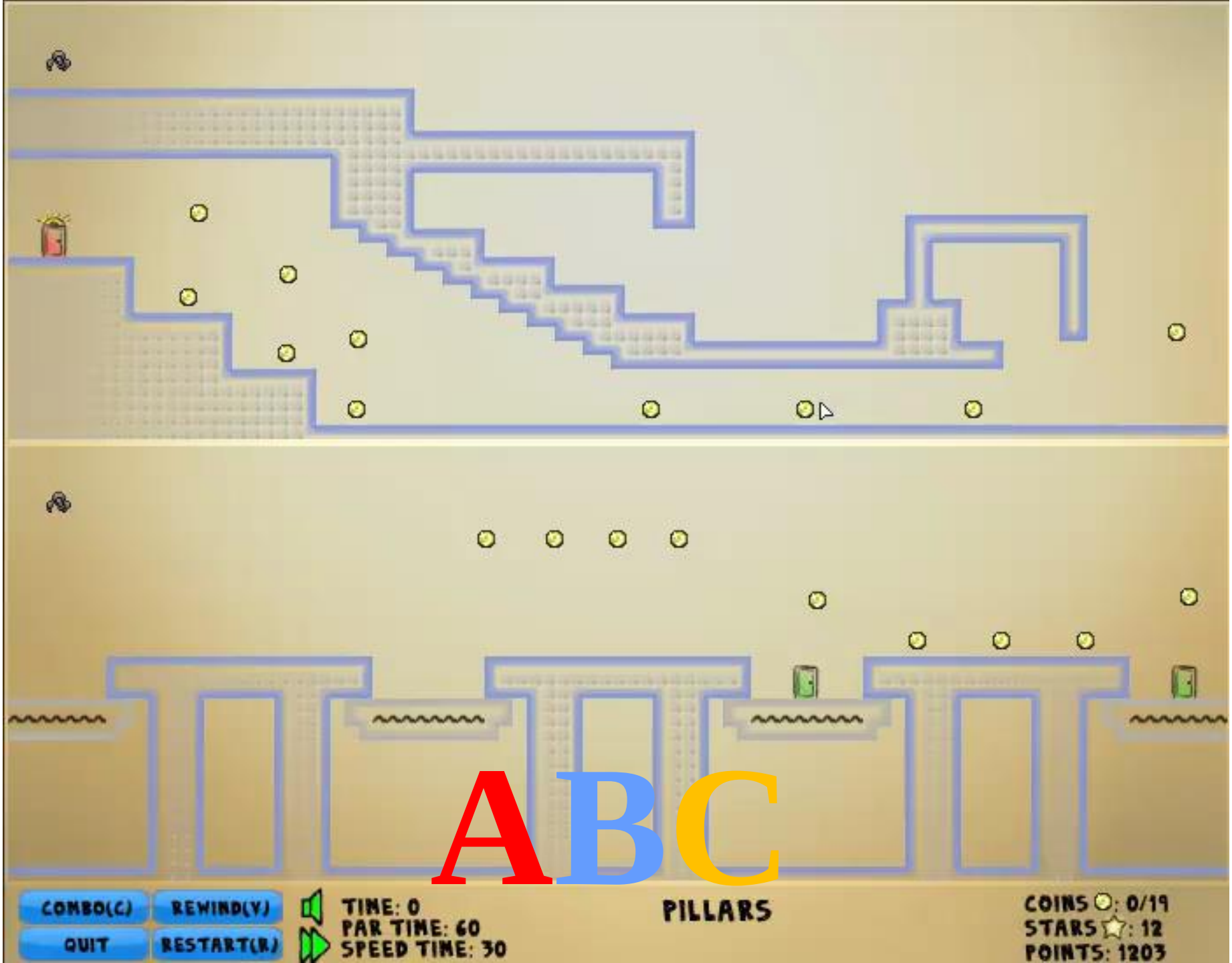

COMBO(C)
REWIND(V)
QUIT
RESTART(R)
TIME: 0
PAR TIME: 60
SPEED TIME: 10
BETA
COINS: 0/9
STARS: 3
POINTS: 255

AB

COMBO(C)
REWIND(V)
QUIT
RESTART(R)
TIME: 0
PAR TIME: 60
SPEED TIME: 15
GAMMA
COINS: 0/6
STARS: 6
POINTS: 573

AB


ABC
COMBO(C)
REWIND(Y)
QUIT
RESTART(R)
TIME: 0
PAR TIME: 60
SPEED TIME: 26
MOUNTAINSIDE
COINS: 0/12
STARS: 9
POINTS: 879


COMBO(C)
REWIND(Y)
QUIT
RESTART(R)
TIME: 0
PAR TIME: 60
SPEED TIME: 30
PILLARS
COINS: 0/19
STARS: 12
POINTS: 1203
ABC

Hello Worlds

Mechanics:

A = move B = two worlds C = close world

A AB AB ABC ABC

Moderate reinforcement, high recombination

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Starcraft

331
322
124/138
Protoss Dragoon
Kills: 3
MENU
Replay Progress
Elapsed Time: 1:25
Speed: Fastest x 2

Starcraft

A **AB** **ABC** **ABCD**

Low reinforcement, high recombination

A **B** **C** **D**

A **A** **A** **A**

What's the best?

- No correct answer
- Some reinforcement but not too much
- Some recombination but not too much

- Progress through mechanics
- Explore the design space
- Implement design patterns

- Progress through mechanics
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Explore the design space

- How do mechanics interact in interesting ways?

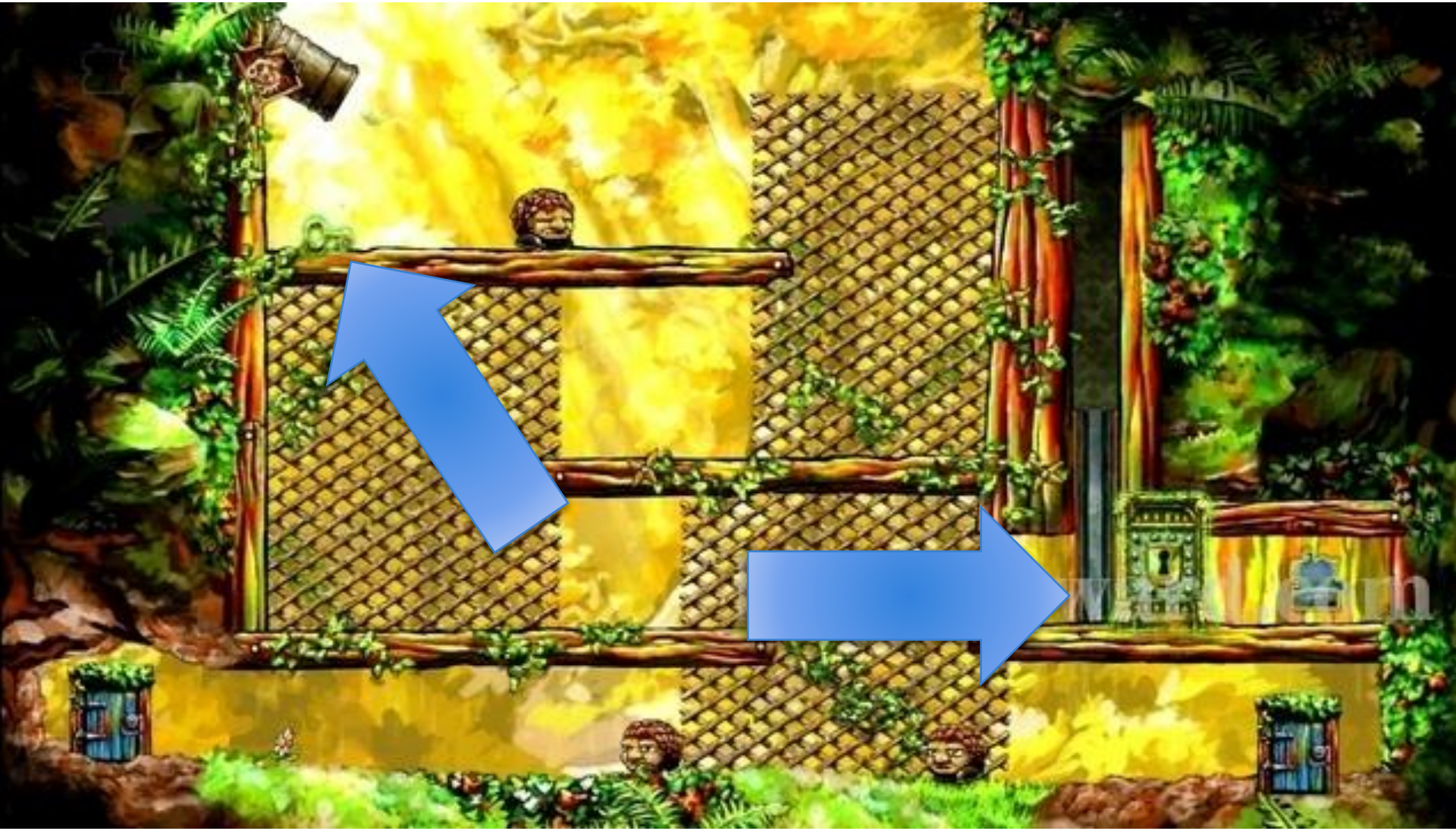
Braid

- World 2: basic mechanics (jump, kill, rewind)
- World 3: unrewindable objects
- World 4: time is connected to motion
- World 5: clone yourself and do two things
- World 6: slow down time
- World 1: time moves backwards

Braid

- World 2: basic mechanics (jump, kill, rewind)
- **World 3: unrewindable objects**
- World 4: time is connected to motion
- World 5: clone yourself and do two things
- World 6: slow down time
- World 1: time moves backwards

PortForward.com



Post Forward Roll

- Progress through mechanics
- Explore the design space
- Implement design patterns

- Progress through mechanics
- Explore the design space
- Implement design patterns

What is a design pattern?

what everyone else does

First-person Shooter Design Patterns

Arena

Stronghold

Sniper spot

Choke Point

- Progress through mechanics
- Explore the design space
- Implement design patterns

Rest of class

- Group meeting time
- I will come around to each group

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