CS2261 Media Device Architecture

Announcements:

* Last HW due next week, very time consuming so start soon
* Afterwards, milestones for final project will begin

Maps

* Always 32 tiles by 32 tiles = 256x256 pixels
  + 1024 tiles total
  + One map is always this big
* Background sizes vary though
  + BG\_SIZE0

|  |
| --- |
|  |

* + - One singular map, 256 rows x 256 cols
  + BG\_SIZE1

|  |  |
| --- | --- |
| 0 | 1 |

* + - Wide, but two maps out together
    - 256 rows x 512 cols
    - On big array
  + BG\_SIZE2

|  |
| --- |
| 0 |
| 1 |

* + - 512 rows x 256 cols
  + BG\_SIZE3

|  |  |
| --- | --- |
| 0 | 1 |
| 2 | 3 |

* + - 4 maps, 512 x 512
* BG\_SIZE0 is the default map size
  + It repeats every 256 rows and cols
  + Each of the backgrounds repeat
    - Scrolling
* Background size doesn’t change the number of max tiles you can have

Animation:

* Animation is just a bunch of images flashing with small changes
  + Repeating frames
* States are the different ways something is being animated
  + Sprites have walk-cycles, usually with 4 states and 4 frames per state
  + Call each frame based on state to make an animation
  + Have to iterate through the frames using the attribute for TILEID in attribute 2

DEMO FOR PIKACHU/Lab