6.111 Newscasting

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Overview

- **Aim**: To create a do-it-yourself newscast
Block diagram
Division of Labor

- **Obinna:**
  - Input
  - Video Processing

- **Jyotsna:**
  - Control
  - Output
Input

- Generation of the NTSC-decoder chip initialization signals
- Generation of YCrCb data
- Generation of vertical and horizontal synchronization signals
Video Processing

- Image Composition module generates the composite video signal to be output
- Chroma keying is commonly known as blue screening
Control

- Allows user to take pictures and stores these in memory
- Allows the user to switch between pictures
- Allows input of text directly into screen
Output

- Output is finally displayed onto a VGA monitor
- Signals from the image composition block go to the ADV7125 Video DAC.
Improvements

- Second camera to allow real-time feed
- Multiple display options
- Adding a graphical interface
Timeline

- 11/16
  - Input module
  - ycrcb to rgb conv

- 11/23
  - Address generation module
  - Text display module
  - Conversion modules
  - Image composition module

- 11/30
  - Display FSM
  - Output module
  - Video Buffering

- 12/07
  - Working prototype