

## CRC Cards

### Model

#### Responsibilities

##### Encapsulates

3DImage file (.nrrd, .nifti)

3DImage. units

ImageProcessing class

ImageProcessing. 2DSlice

circumference

##### Handles

Do edge detection and circumference calculation on 2DSlice

Compute correct conversion factor for pixels to cm, mm, etc.

##### Forwards

3DImage file to ImageProcessing

#### Collaborators

Controller

ImageProcessing

### Image Processing

#### Responsibilities

##### Encapsulates

3DImage

2DSlice

##### Handles

3D rotations on 3DImage

Converts 3DRotatedImage to 2D slice using global settings

#### Collaborators

Model

## Controller

### Responsibilities

Encapsulates

Model

View

Handles

Call Model methods in response  
to user inputs from View

Forwards

Model's ImageProcessing.2DSlice  
to View

### Collaborators

Model

View

## View

### Responsibilities

Encapsulates

Image Visualization class

2DSlice

circumference

Handles

Render GUI, including 2DSlice and  
circumference

Forwards

User input events to Controller

### Collaborators

Controller

Image Visualization

## Image Visualization

### Responsibilities

Encapsulates

2DSlice

Handles

Manipulates 2DSlice for prettier  
presentation in View

### Collaborators

View