To Invoke: $ ./tagtest [options] input_image.pnm
Options:
	-d: Debug, displays image at every step

tag36h11.h/tag36h11.c

Description:
	Creates the various codes supplied for tag36h11

tag36h10.h/tag36h10.c

Description:
	Creates the various codes supplied for tag36h10

zarray.h/zarray.c

Description:
	zarray - an arraylist in java or vector in C++, includes various functions for sorting, mapping, and more.

image_u8.h/image_u8.c

Description:
	Adds width, height, and stride to the image file type. image_u8 can convert a .pnm, rgb3, draw lines, convolve, rotate, gaussian blur[1], and some arm architecture functionality. image_u8->buff stores 1, (width * height) buffer. Essentially, using 1 byte per pixel.

image_f32.h/image_f32.c

Description:

Converts the image_u8 image to an image_f32, the image_f32->buff stores width*height pixels at the sizeof(float). A comment states scales by 1/255u.

image_u32.h/image_u32.c

Description:

Same as image_f32, however the image_u32 buff stores 1 array of size height*width*sizeof(uint32_t).

unionfind.h/unionfind.c

Description:

Finds unions in a tree, the tree is presumably a tree of the image. However, it is abstract enough it does not need to be a tree. This could determine squares/edge lines. (?)

zhash.h/zhash.c

Description (well documented):

Creates a hash table for storing data, it is not bound by specific images. More or less just a hash container.

matd.h/matd.c

Description:

Very similar to the OpenCV Mat datatype[2]. More or less it is a matrix which represents the image type. This can be manipulated in various ways, i.e. scaled, flip, etc.

homography.h/homography.c

Description:

Creates the homography such that, y = Hx. Concatenates points x and y, essentially building lines.

graymodel.h/graymodel.c

Description:

Interpolate various points using matd, but completes it on a grey model. Relatively simple, just calls other functions on a grey image.

timeprofile.h

Description:

Adds a timestamp, nothing related to the apriltags algorithm.

g2d.h/g2d.c

Description:

Used to determine points of interest, line intersections, finds distance from line to point, etc. Creates polygons, lines, points for the use of the algorithms.

gridder.h

Description:

Creates a grid for the apriltags algorithm. Breaking the image into a grid is pretty straight forward and easy to understand.

common.h

Description:

Very basic functions, square, find min, find max, etc.