## Four types of information:

Walls (lines)

Room labels (rectangles)

Doors (lines)

Icons (rectangles)

### Steps:

- 1. Hit the Space button (to detect walls).
- 2. Correct walls.
- 3. Save and move back (Shift + S and then <-). (Optional: to better avoid conflicts.)
- 4. Hit the Space button again (to place room labels and extract candidate regions for doors and icons).
- 5. Correct room labels.
- 6. Place doors.
- 7. Place icons.
- 8. Save (and next unannotated image will show up automatically).

# When placing doors and icons:

- 1. Normal mode:
  - a. Doors: click on both endpoints (might need to press Ctrl at the meantime to ignore incorrect candidate regions).
  - b. Icons: draw a rectangle
- 2. click to use candidate regions.
- 3. Draw a straight line (either horizontal or vertical) to use two candidate regions.

# **Buttons:**

Space: magics R: remove A: walls

- 1. Click at both end points of walls. Keep clicking to draw more lines.
- 2. Hit 'a' again to start a new line.
- 3. Press 'Shift to draw a non-orthogonal line.
- 4. To annotate different wall types, please press Tab. Currently, two types are supported.

Tab: change styles

: change Orientation

### D: doors

- 1. Press Ctrl to ignore candidate regions.
- 2. Press Shift to draw a non-orthogonal line.

Z: undo

O: show original image (switch back and forth)

- 1: Living room
- 2: Kitchen
- 3: Bedroom
- 4: Bathroom
- 5: Restroom
- 6: Balcony
- 7: Closet
- 8: Corridor
- 9: Washing room
- 0: PS/MB (Pipeline Space)
- B: bathtub
- C: cooking counter
- W: washing basin
- E: entrance
- T: toilet
- S: Stairs
- Q: special

Shift+S to save

Down to move to next unannotated image. Up to move to previous unannotated image. Right to move to next image. Left to move to previous image

#### **Principles:**

- 1. Doors are always on walls (have overlap and the same orientation).
- 2. Right before saving (after you hit Shift+S), the endpoints of walls will be stitched together automatically when they are close enough (happens after saving), and doors will be automatically adjusted to fit in walls (happens after saving).
- 3. Each room has at least one label unless:
  - a. A room could have no label when this room is mostly occupied by an icon (such as the cross sign or a square sign) and it's unclear what the room type is.
  - b. The room is very small.
- 4. Each room has at least one door unless:
  - a. This room is a PS.
  - b. In some rare cases where there is indeed no door belonging to this room.
- 5. Feel free to ignore image with either terrible quality or terrifying complexity. Also ignore image which appears more than once or images which are very abnormal. In some other

cases, the floorplan image consists of two apartments next to each other with identical geometry (mirrored), you can also choose to ignore such cases. It doesn't hurt to annotate those images, but it just pains. So when you move to next unannotated image, you might want to check next few images to make sure these images are not images ignored by others (move on to the real end of the working queue).

## Terminologies:

http://resources.realestate.co.jp/buy/guide-to-japanese-apartments-floor-plans-photos-and-kanji-keywords/