# Whiffy Design
## First Draft

**Whiffy**

Top level device

WifiControl wifi;
Reporter reporter;
update(): Calls wifi.getAP(), passes to reporter.update();

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**WifiControl**

Gets access point information, returns an ArrayList with AccessPoint objects to be passed to reporter.

public getAP(): Returns ArrayList of AccessPoint objects

private pollAP(): Returns char buf
private parser(char buf): parses buf,creates ArrayList

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**Reporter**

Takes in ArrayList of APs, sends to Statter, recieves statistics to send directly to output devices

ArrayList APs
LCDControl lcd
LEDControl led
Statter stats
bool mode (FALSE for Average, TRUE for Current)

update(APs): Sets new local APs, calls statter and sends Avg/Curr to LCD, LED update functions

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**Statter**

Takes ArrayList of AccessPoints and returns statistics on request.

Statter(ArrayList APs):

update(ArrayLst APs, bool mode): Returns percentage depending on mode

AvgStrength(): returns avg strength percentage
CurStrength(): returns current strength percentage

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**LCDControl**

Controls uLCD

update(int strength, bool mode)
printStrength(int strength)

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**LEDControl**

Controls array of 3 RGB LEDs based on signal strengths

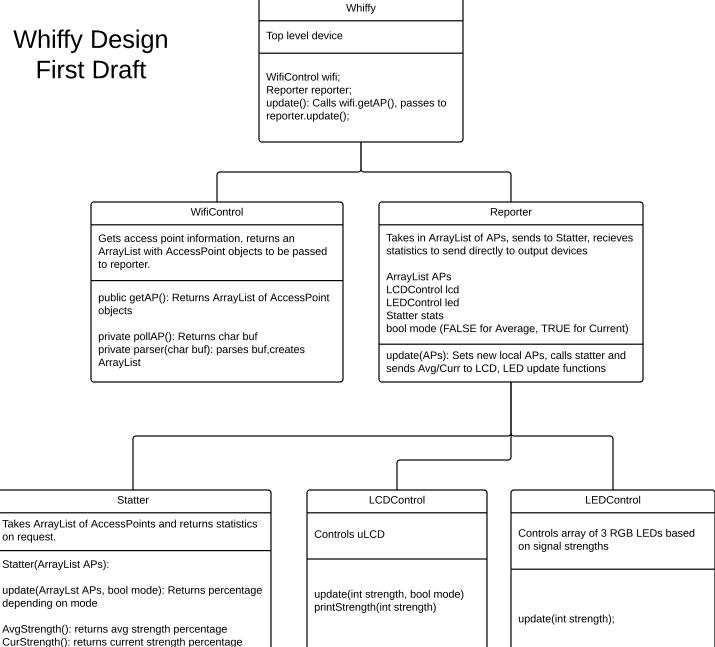update(int strength);

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**AccessPoint**

String SSID: Access point SSID
int strength: Raw RSS strength data
float scaledStrength: Strength scaled to percentage
bool connected: True if module is connected to this AP

AccessPoint(string SSID, int strength): Constructor