CS 332 Programming Assignment 1
Largest Rectangle

DELIVERABLES: Deliver one Racket file by uploading to Canvas.

Only electronic documents submitted via Canvas are acceptable. Do not submit a hard copy of your assignment. Do not email your assignment to the course instructor or grader.

Important: Late assignments will not be graded.

PROBLEM DESCRIPTION: A point, P, is an ordered pair of coordinates, P = (X Y). A rectangle, R, is defined by its upper left and lower right points, R = ($P_U$ $P_L$) = (($X_U$ $Y_{U)}$ ($X_L$ $Y_{L)}$).

Given a list of N rectangles, L = ($R_1$ $R_2$ $R_3$ … $R_N$), return the rectangle having the largest area.

Example: Given L = ( (3 12 9 5) (7 7 12 2) (8 11 12 9) (12 5 16 3)), return: (3 12 9 5).

RUBRIC: Per that grading rubric below.

| Deliverable | Points | Awarded |
|---|---|---|
| Correctness | 30 | |
| Totals | 30 | |