

Problem Set 5

Animations

Write an animation using **big-bang** and the appropriate event handlers and functions for each of the exercises below. Be certain to include all components of the **Design Recipe** when writing any function.

1. Find an outdoor scene on the Web. Develop an animation in which a “stick-figure” of a person is positioned somewhere appropriate on the scene, and rotates 90° every second, staying in the same place; the background scene should not rotate!
2. Develop an animation which starts with a small picture (of the user’s choice) at the top-left corner of a blank window, then replaces it with two of the same pictures side by side, then with a row of four, then with a row of eight, then with a row of sixteen . . . doubling every three seconds.
3. Write an animation that shows a blue progress bar 50 high by 300 wide, initially just an outline but filling in from left to right at 1 pixel per tenth second. (**Note:** Your animation should appear to stop changing after 30 seconds, when the progress bar reaches 100% full, but in fact, it’s still running, but not showing any *visible* change.)
4. Write an animation of a circle that doubles its radius every 2 seconds, but decreases the radius by 4 pixels every time a key is typed on the keyboard.
5. Write an animation of a string that changes every clock tick and is displayed in an animation window. The first character of the string should be removed and placed at the end of the string. If you make the initial string have several spaces at the end, the resulting animation will look like scrolling text.