```
 1: #ifndef BODY_HPP
 2: #define BODY_HPP
 3:
 4: #include <iostream>
 5: #include <SFML/Graphics.hpp>
 6: #include <SFML/Window.hpp>
 7: #include <SFML/System.hpp>
 8: #include <string>
 9:
10: class Body : public sf::Drawable
11: {
12: public:
13:
14:   Body();
15:   Body(double x, double y, double vel_x, double vel_y, double user_mass,
16:        std::string u_filename);
17:   ~Body();
18:
19:   //Accessors
20:   double get_xpos();
21:   double get_ypos();
22:
23:   //Mutators
24:   void set_radius(double rad);
25:   void set_window(int size);
26:
27:   void update_pixel_pos();
28:
29:   friend std::istream& operator >> (std::istream &input, Body &B);
30:
31: private:
32:
33:   virtual void draw(sf::RenderTarget& target, sf::RenderStates states) const
;
34:
35:   double xpos, ypos, velocity_x, velocity_y, mass, univ_rad;
36:   sf::Texture texture;
37:   sf::Sprite sprite;
38:   int window_size;
39:   std::string filename;
40:
41: };
42:
43:
44:
45: #endif
```