

Uno
char *color; //Color associated with Uno card int value; //Value associated with Uno card
<pre> Uno(){color=new char [8];} //Default constructor Uno(char *x,short y){color=x; //Constructor 2 (overloading) value=y;} Uno(const char []); //Copy constructor virtual ~Uno(){delete [] color;} //Destructor void operator=(const char[]); //Assign card color to string void operator=(const short x); //Assign value of card virtual bool operator==(const char x[]); //Assign value of card virtual bool operator==(const short x); //Assign value of card virtual char *getColor()const{return color;}; //get color virtual int getValue(){return value;} //returns value virtual void setColor(char *); //Mutator-sets color of card virtual void setValue(int); //Mutator-sets value of card </pre>

Pile

```
Uno *all;  
short size;
```

```
Pile(); //Pile Constructor  
virtual ~Pile(){delete [] all;}; //Pile Destructor  
virtual void modSize(short x){size+=x;}; //With a given value- size is  
//modified  
virtual void upSize(){size++;}; //Increments size  
virtual void downSize(){size--}; //Decrements size  
virtual short getSize()const{return size;}; //Returns size  
virtual short getTotal()const{return 108;}; //Returns size of standard  
//Uno Deck  
virtual char *getColor(int i){return all[i].getColor();}; //Returns color  
virtual short getValue(int i){return all[i].getValue();}; //Returns value  
virtual void add(char*,int); //Assigns a color an Uno card in Pile  
//Returns the card on top of the pile  
virtual void top(){cout<<getColor(size-1)<<" "<<getValue(size)<<endl;};  
//Overloaded operator, increments size  
virtual void operator++(){size++;}; //Increments size
```

Deck

```
bool stat[108];    //Status of Uno cards in deck
```

```
Deck();           //Default constructor  
void define();    //Defines entire deck of Uno cards  
void display();   //Displays entire deck of Uno cards  
bool status(int); //Returns true if card is available, false otherwise  
char *getColor(int) const; //Returns indicated card's color  
short getValue(int) const; //Returns value of a card  
void falsify(int); //Falsifies indicated index in bool array  
int getIndex();   //Returns a valid index of a card that can be drawn  
void reset();     //resets the stat array
```

Player

bool skip; //Flag - notifies whether or not player is skipped

```
Player(); //Default Constructor
void draw(char*,int); //Draws a card from deck
bool getSkip()const{return skip;}; //returns skip
void reset(){skip=0;}; //resets skip flag
void set(){skip=1;}; //sets skip flag
void hand(); //Displays the player's hand
void remove(int); //Remove the specified card from player
char *wild(); //Returns a color depending on player selection
```