06/28/18 02:39:02 /home/ivan/Desktop/Repositorio-Final/vector.h

```
 1  #ifndef VECTOR__H
 2  #define VECTOR__H
 3
 4  #include <stdio.h>
 5  #include <stdlib.h>
 6
 7  #include "contexts.h"
 8  #include "types.h"
 9  #include "errors.h"
10  #include "setup.h"
11
12  #define INIT_CHOP 4
13  #define ADT_VECTOR_CHOP_SIZE 4
14
15  typedef status_t (*destructor_t) (void *);
16  typedef int (*comparator_t) (void *, void *);
17  typedef status_t (*printer_t) (void *, const void *, FILE *);
18
19  typedef struct
20  {
21      void ** elements;
22      size_t size;
23      size_t alloc_size;
24      destructor_t destructor;
25      comparator_t comparator;
26      printer_t printer;
27  }ADT_Vector_t;
28
29  /*Prototipos de funciones*/
30  status_t ADT_Vector_new(ADT_Vector_t ** p);
31  status_t ADT_Vector_delete (ADT_Vector_t ** p);
32  void * ADT_Vector_get_element (ADT_Vector_t * v, int position);
33  status_t ADT_Vector_set_element(ADT_Vector_t ** v, size_t position, void * new_element);
34  bool_t ADT_Vector_is_empty (ADT_Vector_t * p);
35  status_t ADT_Vector_set_printer(ADT_Vector_t * v, printer_t pf);
36  status_t ADT_Vector_set_comparator(ADT_Vector_t * v, comparator_t cf);
37  status_t ADT_Vector_set_destructor(ADT_Vector_t * v, destructor_t df);
38  status_t ADT_Vector_export (ADT_Vector_t * v, const void * context, FILE * file, setup_t *
    setup);
39  status_t ADT_Vector_append_element(ADT_Vector_t ** v, void * element);
40  status_t ADT_Vector_swap_elements (void ** element1, void ** element2);
41  status_t ADT_Vector_sort_elements (ADT_Vector_t ** vector, status_t (*elements_swapper)(void **,
    void **));
42
43  #endif
```