06/27/18 07:39:26 /home/ivan/Desktop/Repositorio-Final/vector.h

```c
#ifndef VECTOR__H
#define VECTOR__H

#include <stdio.h>
#include <stdlib.h>

#include "types.h"
#include "errors.h"
#include "setup.h"

#define INIT_CHOP 4
#define ADT_VECTOR_CHOP_SIZE 4

typedef status_t (*destructor_t) (void *);
typedef int (*comparator_t) (void *, void *);
typedef status_t (*printer_t) (void *, const void *, FILE *);


typedef struct
{
    void ** elements;
    size_t size;
    size_t alloc_size;
    destructor_t destructor;
    comparator_t comparator;
    printer_t printer;
}ADT_Vector_t;

/*Prototipos de funciones*/
status_t ADT_Vector_new(ADT_Vector_t ** p);
status_t ADT_Vector_delete (ADT_Vector_t ** p);
void * ADT_Vector_get_element (ADT_Vector_t * v, int position);
status_t ADT_Vector_set_element(ADT_Vector_t ** v, size_t position, void * new_element);
bool_t ADT_Vector_is_empty (ADT_Vector_t * p);
status_t ADT_Vector_set_printer(ADT_Vector_t * v, printer_t pf);
status_t ADT_Vector_set_comparator(ADT_Vector_t * v, comparator_t cf);
status_t ADT_Vector_set_destructor(ADT_Vector_t * v, destructor_t df);
status_t ADT_Vector_export (ADT_Vector_t * v, const void * context, FILE * file, setup_t setup);
status_t ADT_Vector_append_element(ADT_Vector_t ** v, void * element);
status_t ADT_Vector_swap_elements (void ** element1, void ** element2);
status_t ADT_Vector_sort_elements (ADT_Vector_t ** vector, status_t (*elements_swapper)(void **, void **));

#endif
```