

STACK

- Collection of elemets
- LIFO
- Top end
- Push,Pop,isEmpty,Peep(Peek),isFull

ADT-Stack

Specifications for a Stack

- Void CreateStack(Stack *s);
•Precondition:None
•Postcondition:The stack has been created and is initialized to be empty
- Void StackEmpty(Stack *s);
•Precondition:Stack exists and it has been initiaized
•Postcondition:Return true if the stack is empty,False otherwise

- Void StackFull(Stack *s);

- Precondition:Stack exists and it has been initiaized

- Postcondition:Return true if the stack is full,False otherwise

- Void push(StackEntry item,Stack *s);

- Precondition:Stack exists and it is not full

- Postcondition:Arg item has been stored at the top of the stack

- Void pop(StackEntry *item,Stack *s);
 - Precondition:Stack exists and it is not empty
 - Postcondition:Arg item has been removed and returned in *item
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- Void clearStack(Stack *s);
 - Precondition:Stack exists and it has been initialized
 - Postcondition:All entries in the stack have been deleted; stack is empty

- `int stackSize(stack *s);`

- Precondition: Stack exists and it has been initialized

- Postcondition: The function returns the number of entries in the stack

- `Void stackTop(StackEntry *item, Stack *s);`

- Precondition: stack exists and it is not empty

- Postcondition: The item at the top of the stack in * item without altering the stack contents

- Void traverseStack(Stack s,void (*visit()));
- Precondition:Stack exists and it has been initiaized
- Postondition:The function that visit points to, has been invoked for each entry in the stack,beginning with the entry at the top and proceeding toward the bottom of the stack