# Assignment 2 Checklist

## Programming / Functionality

* Define a structure `StackNode` to represent each node in the linked list. This structure should  
  contain:  
  • A pointer to a string representing the URL visited  
  • A pointer field to point to the next node
* Define a structure `Stack` to represent the stack itself. This structure should contain:  
  • A pointer to the top node of the stack
* `void push(Stack\* stack, char\* newUrl)`: Adds a new URL to the top of the stack.
* `char\* pop(Stack\* stack)`: Removes and returns the URL from the top of the stack.
* `char\* peek(Stack\* stack)`: Returns the URL from the top of the stack without removing it.
* `bool isEmpty(Stack\* stack)`: Checks if the stack is empty.
* Define a structure `QueueNode` to represent each node in the linked list. This structure should contain:  
  • A pointer to a string representing the URL visited  
  • A pointer field to point to the next node
* Define a structure Queue to represent the queue itself. This structure should contain:

• Pointers to the front and rear nodes of the queue

* `void enqueue(Queue\* queue, char\* newUrl)`: Adds a new URL to the rear of the  
  queue.
* `char\* dequeue(Queue\* queue)`: Removes and returns the URL from the front of the  
  queue.
* `char\* peek(Queue\* queue)`: Returns the URL from the front of the queue without  
  removing it.
* `bool isEmpty(Queue\* queue)`: Checks if the queue is empty.
* Implement a menu-based user interface allowing users to:  
  1. Visit a new web page and add it to the browsing history.  
  2. Navigate back to the previous web page.  
  3. Navigate forward to the next web page.  
  4. Display the current web page and the browsing history.  
  5. Exit the browser

## Submitting

* submitting:
  + m2.cpp
  + checklist.pdf