Design for CSC Project 1:

1. Display welcome message
2. Gather Data:
   1. Prompt for number of family members
   2. Collect family member data (names and teeth records)
   3. **Prompt for number of people**
      * Validate the input for the number of family members (1-6)
   4. **Collect member data**  (For each family member)
   * Prompt for names
   * Prompt for upper yeeth
     + Validate teeth input (I, B, M) and teeth count (max 8)
   * Prompt for lower teeth
     + Validate teeth input (I, B, M) and teeth count (max 8)
3. **Process Calculations and display menu options**
   1. Display menu options
   2. Get menu input
   3. Print family teeth
   4. Extract a tooth
      1. Check if a tooth present
      2. Extract a tooth if there is a tooth present in location
   5. CalculateRootCanalIndices
      1. Perform root canals using quadratic formula
         1. Compute quadratic equation roots for I, B, M
      2. Report the family’s root canal indices
4. Display results
   1. Exit the menu
      1. Exit (with a [smile](https://static.dw.com/image/16792432_101.jpg))