## LIFE CYCLE METHODS

1. Mounting
   1. Its called when an instance of component is being created and inserted into the DOM
   2. Mounting Methods
      1. constructor(props)
         1. A Special function that will get called whenever a new component is created
         2. Initialize the state and binding the event handlers
         3. Supor(props)-dirctly overrides the this.state
      2. Static getDerivedStateFromProps(props,state)
         1. It is used rarely
         2. Use to set the state
      3. render()
         1. Read props and state and return JSX
         2. Do not change state or interact with DOM or make ajax calls.
         3. Children component lifecycle methods are also executed.
      4. componentDidMount()
         1. invoked immediately after a component and all its children components have been rendered to the DOM.
         2. Casuse side effects: ex:intarct with DOM or perform any ajax class to load the data
2. Updating
   1. Updated methods are called when a component is being re-rendered as a result of changes to either its props or state.
   2. Updating Methods
      1. Static getDerivedStateFromProps(props,state)
         1. Method is called every time a component is re-rendered.
         2. Set the state.
      2. shouldComponentUpdate(nextProps,nextState)
         1. Performance optimization
      3. Render()
         1. Read props and state and return JSX
      4. getSnapshotBeforUpdate(prevProps,prevState)
         1. rarely used method
      5. ComponentDidUpdate(prevProps,prevState,snapshot)
         1. Called after render is finished in the re-render cycle
3. Unmounting
   1. It’s called when a component is being removed from the DOM
   2. Unmounting Methods
      1. componentWillUnmount()
         1. Method is invoked immediately before a component is unmounted and destroyed
         2. Do not call the setState method.
         3. Do some clean up tasks
            1. Cancelling any network requests, removing event handlers, cancelling any subscriptions and also invalidating timers.
4. Error Handling
   1. Are called when there is an error during rendering , in a lifecycle method, or in the constructor of any child component.
   2. Error Handling Methods
      1. Static getDerivedStateFromError(error)
      2. componentDidCatch(error,info)
         1. When there is an error either during rendering ,in a life cycle method,or in the constructor of any child component.