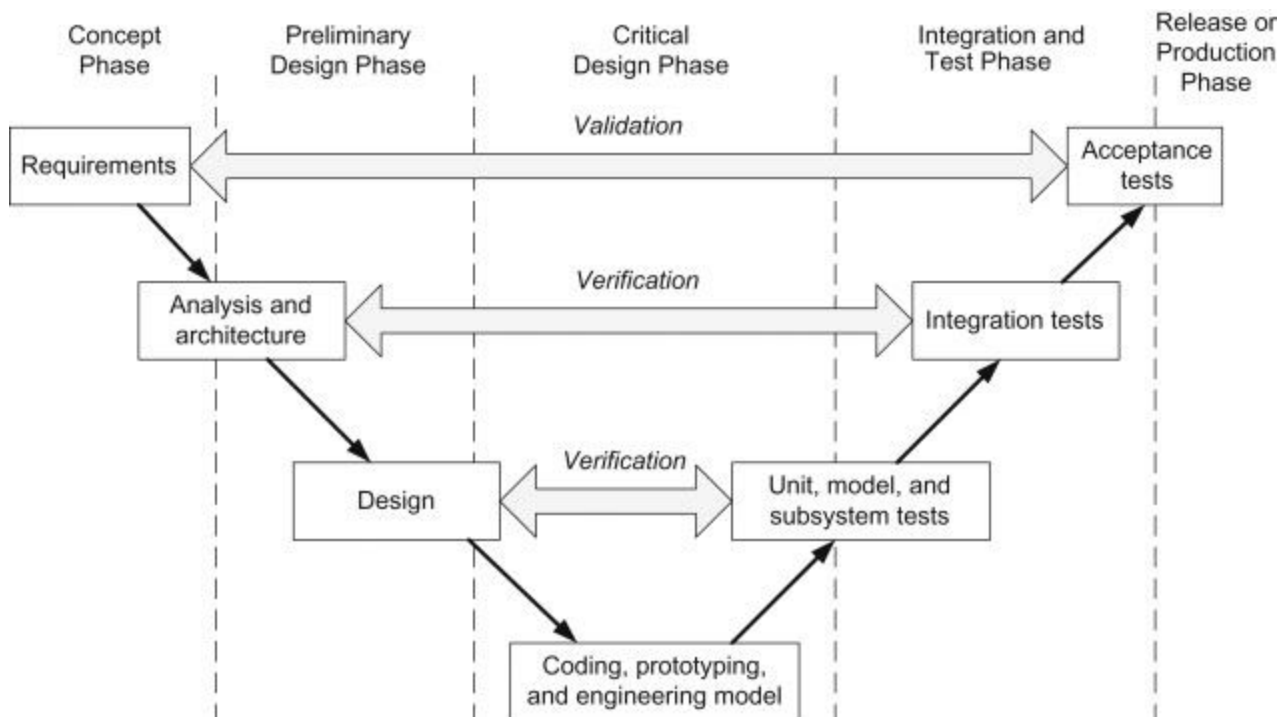


SOFTWARE DEVELOPMENT PROCESS



1. Product Conceptualization (Concept Phase)
2. Product Architecture and Design (Preliminary Design Phase)
3. Product Construction or Development (Critical Design Phase)
4. Product Testing (Integration and Test Phase)
5. Product Release (Release or Production Phase)

1. **Product Conceptualisation:** Every product has to start with an idea. In some cases, this might be reasonably simple, conceptualizing a new product on something that already exists, or may be something out of the box. Once the idea is selected, significant time is spent on Market research, Functional analysis, technical analysis, Feasibility analysis, Return on Investment, and Prototype development. This requirement analysis is done by the most skilled and experienced software engineers in the organization. After gathering and analyzing requirements from the client, the scope document is generated.
2. **Product Architecture and Design:** The next phase is to design the technical architecture of the product. In this phase, the business team provides the business specification to technical teams who then build the architecture of the product, create workflow diagrams, and Database design.

3. **Product Development:** In this phase, development teams start developing the product. Development teams may use Waterfall or Agile methodologies to develop a product. Most of the software companies are now moving towards an Agile development methodology to make the product development process faster. In this phase, teams develop, perform unit tests, model tests, UI tests, and any other testing types depending on the product type. Once this phase is completed, the team creates an Alpha release (Deployed on Staging Server) which may be mostly internal and limited to a few external users.
4. **Product Testing:** Once the production is Alpha released, a continuous and thorough End-to-End testing is done to the Product, including Unit Testing and API testing for Backend, User Interface testing for Design, User Acceptance Testing to test the requirements of the project, and Integration Testing for the Architecture.
5. **Product Release:** Once the team is confident about the functionality, usability, and stability of the product based on the Alpha release and receives feedback, the team moves towards the Beta release phase (Deployed on Production Server). In the beta release, companies may choose to open it to all the customers or choose to provide access to limited customers who request for Beta access. In this phase, the team wants to get feedback from external customers and make any changes accordingly. Once the team is satisfied with the beta feedback and necessary changes are made to the product, a public release of the product takes place. Public release involves broad announcements, PR, and so forth to create an impact depending on the product.

Prototype Design (Player Registration Form)

Design, Interaction and Working

The Prototype is designed using **HTML, CSS, Javascript** and **JQuery**. It contains a **player.html** file that can be opened in a Standard Browser to interact with the prototype.

The form contains **3 Toggle buttons** that appear or disappear depending on the user interaction, which is based on the “Rules for Player Registration provided”. The **‘First Toggle’** contains the “Player Registration Form” that takes information about Forname, Surname, Date of Birth, Country, Phone Number, Email and Address, where ‘Phone no.’ and ‘Email’ fields are Optional and other fields are required. The **‘Second Toggle’** checks if the person registering is a ‘Player’ or ‘Legal Guardian’. And the **‘Third Toggle’** contains ‘Legal Guardian Registration Form’ that takes information about Forname, Surname, Date of Birth, Country, Phone Number, Email and Address, where Phone Number is Optional and other fields are Required.

When the player enters the DOB, the **age** is calculated automatically.

Age Conditions Implementation

1. If the player is below 18, the 'Second Toggle' disappears as only 'Legal Guardian' can register for the players.
2. If the player is 18 or older, then he needs to select in the second toggle as whether 'Player' is registering or the 'Legal Guardian'. If the Player selects the "Player" option, then the 'Third Toggle' disappears automatically, as 'Legal Guardian's information is not required.
3. The Players between the age 8 to 21 are only allowed to "Submit" the project. If a player outside the criteria tries to register, they will receive an error message saying "**You should be between 8 to 21 years to submit this form**". The age for the user is calculated when they enter their **DOB** in the 'Player Registration form'.

The **Submit** button does not take us to anywhere, as a 'URL' should be included to which the information should be sent. Based on that, the number of entries can be restricted depending on whether the 'Player' is registering or the 'Legal Guardian'.

The form contains a '**Progress Bar**' that increments the Progress as the 'Player Registration Form' is filled.

Tip:

1. A feature could be implemented that could give Players some 'credits' when the 'Progress Bar' is completed, that is the form is completely filled. That could entice more Players to 'Register'.
2. Subsequent Error messages could be provided for 'Legal Guardian Registration Form' like, "**Legal Guardian's contact information could not be same as Player's** " and, "**Guardian's age should be greater than 22**".