**User Concept Template**

**1. Introduction**

* **Purpose**: Briefly state the purpose of this document – to define and synthesize a comprehensive understanding of the system's intended users, their needs, behaviors, and experiences. This artifact serves to ensure a user-centered design approach, aligning technical development with real-world user expectations.
* **Scope**: Define the boundaries of this user analysis, specifying which system or project it applies to and what aspects of user interaction and experience are covered.

**2. User Identification and Profiling**

* **Purpose**: To systematically identify and characterize all relevant user groups who will interact with the system, considering their backgrounds, goals, and contexts.
* **Content**:
	+ **User Profiles / Personas**: Provide detailed, archetypal representations of key user groups based on research data. These should go beyond basic demographics to capture:
		- **Goals**: What users want to achieve with the system.
		- **Frustrations / Pain Points**: Challenges users currently face or might encounter.
		- **Behaviors**: How users typically interact with systems or perform relevant tasks.
		- **Motivations**: Underlying reasons for user actions and desires.
		- **Background**: Relevant skills, experience, and technical proficiency.
		- **Roles**: Their specific roles in relation to the system, which can include normal users and unexpected users.
	+ **Target Audience Identification**: List and categorize all user groups (e.g., end-users, administrators, maintainers, support staff).

**3. User Needs and Expectations**

* **Purpose**: To document what users need and expect from the system, focusing on their desired outcomes and experience. This information is foundational for translating abstract user data into actionable requirements and features.
* **Content**:
	+ **User Needs and Desires**: Detail the functionalities, information, and interactions users require to achieve their goals effectively and efficiently.
	+ **Desired Experiences**: Describe the qualitative aspects of user interaction, such as ease of use, responsiveness, intuitiveness, and overall satisfaction.
	+ **Identified Pain Points and Challenges**: Elaborate on specific difficulties, inefficiencies, or negative experiences users currently face that the new system should address.
	+ **Human Factors Considerations**: Include aspects related to human factors, such as cognitive load, physical ergonomics, and environmental conditions affecting user performance.

**4. User Workflows and Tasks**

* **Purpose**: To illustrate how users will interact with the system to accomplish specific tasks and achieve their goals, providing a basis for operational scenarios and use cases.
* **Content**:
	+ **User Workflows / Task Analyses**: Detail the sequence of steps users will take to perform key tasks with the system.
	+ **User Journey Maps**: Visualize the complete experience users have with the system across multiple touchpoints, highlighting pain points, emotional highs and lows, and opportunities for improvement. These maps ensure the design addresses the entire user experience, not just isolated features.
	+ **Use Cases / Scenarios**: Provide narrative descriptions or diagrams showing how users will interact with the system in typical operational contexts.
	+ **Empathy Maps (Optional)**: Provide deeper psychological insight into user mindsets—what users think, feel, see, hear, say, and do in specific scenarios, fostering genuine empathy for design choices.

**5. Research Basis and Inputs**

* **Purpose**: To summarize the sources of information used to develop the User Concept, establishing credibility and providing traceability.
* **Content**:
	+ **Research Summaries**: Synthesize key findings from user research activities, such as:
		- User interviews.
		- Surveys.
		- Usability tests.
		- Field observations.
		- Competitive analysis.
	+ **Input from Stakeholder Concept**: Reference how the broader stakeholder needs and expectations, as captured in the Stakeholder Concept artifact, inform this user-specific document.
	+ **Limitations and Assumptions**: Document any limitations in the user research or assumptions made during the development of the User Concept.

**6. Relationship to Other Concepts and Artifacts**

* **Purpose**: Explain how the User Concept artifact integrates with and influences other systems engineering activities and artifacts.
* **Content**:
	+ **Foundation for Concept of Operations (ConOps)**: State that this artifact feeds into and helps define the ConOps, which describes the high-level concept of how the system will be used.
	+ **Input to Requirements Definition**: Explain how the user needs and expectations captured here are translated into formal system requirements, serving as a basis for traceability and justification of design decisions.
	+ **Guidance for Design and Development**: Articulate how the User Concept serves as a critical bridge between user research and system implementation, guiding design decisions and ensuring the system is built to truly meet user needs.
	+ **Informing Human Systems Integration (HSI)**: Emphasize that the User Concept directly influences HSI considerations, ensuring human operators and organizational aspects are considered from various viewpoints, supported by scenario-based design.
	+ **Basis for Training Concept**: Indicate how the user profiles and task analyses inform the development of training programs and materials.
	+ **Validation Criteria**: Highlight that the User Concept contributes to the criteria against which the developed system will be validated, ensuring it satisfies user needs in its operational environment.

**7. Appendices (Optional)**

* **Detailed Persona Documents**: Full descriptions of each user persona.
* **Full User Journey Maps**: Detailed diagrams illustrating user interactions.
* **Raw Research Data**: Anonymized interview transcripts, survey results, etc.
* **References**: List any source documents or external research materials.