

Learning Design Standard

User Research

Key content areas

The following table outlines content areas that need to be addressed.

Unit = area of learning.

Topic = Component of area of learning.

Unit 1. The role of user research in the digital service design context

Learning objective: Describe the context and processes of user research

Topic title	Topic learning objectives	Critical content
1.1 Transforming government digital service delivery	Define the Australian Government context for digital service delivery	<ol style="list-style-type: none">1. The Australian Government's Digital Transformation Agenda2. User research in the APS digital transformation of government services
1.2 User research for government services	<p>Describe the role of user research in meeting the Digital Service Standard</p> <p>Explain the importance of understanding all user groups</p> <p>Conduct user research</p> <p>Conduct user research as a team sport</p>	<ol style="list-style-type: none">1. Meeting the Digital Service Standard2. Understanding the users, including:<ul style="list-style-type: none">– who they are and what they're trying to do– how they're trying to do it now– how their life influences what they do3. How to make research inclusive of all users, including:<ul style="list-style-type: none">– how people with different needs use the service (including people from culturally and linguistically diverse backgrounds)– refining the design, functionality and content based on different user experiences– meeting government accessibility requirements4. Determining what works, including:<ul style="list-style-type: none">– what issues people face in interacting with the government– researching how users can use the service to get the right outcome, rather than their preference– researching the user's complete journey and the ways they interact with the service

Topic title	Topic learning objectives	Critical content
1.2 User research for government services	<p>Describe the role of user research in meeting the Digital Service Standard</p> <p>Explain the importance of understanding all user groups</p> <p>Conduct user research</p> <p>Conduct user research as a team sport</p>	<ol style="list-style-type: none"> Service teams working in an agile way, including: <ul style="list-style-type: none"> – updating the teams understanding of users and their needs – testing new design ideas and features to see if they work well for all users – recognising problems users are having How to involve the team, including: <ul style="list-style-type: none"> – team members watching real users interact with the service and discuss – team members participating in analysis to help agree on the findings and resulting actions – user researchers working with designers and developers on design decisions and prototypes Assembling people in research to help make decisions to improve the service <ul style="list-style-type: none"> – inviting the team, stakeholders, and people in the organisation who deal with users – reducing the risk of bias and unchallenged assumptions – limiting the influence of individual stakeholders
1.3 User research overview	<p>Describe the various applications of user research in the broader business context</p>	<ol style="list-style-type: none"> Applications of user research <ul style="list-style-type: none"> – urban design – military – retail and commerce Definition and purposes of user research The user's role in product and service design What user research is not, what makes it different from market research and stakeholder consultation Generative versus evaluative methods of research <ul style="list-style-type: none"> – goals – why it is valuable – conducting the research

Unit 2. User research protocols and governance

Learning objective: Foundational methods for practicing design research.

Topic title	Topic learning objectives	Critical content
2.1 Privacy	Describe procedures for handling information securely	<ol style="list-style-type: none">1. Data collection, including:<ul style="list-style-type: none">– handling sensitive data– ownership– confidentiality2. When to not collect, use or store participants research data, including:<ul style="list-style-type: none">– getting participants consent if collecting, using or storing any personal data– informing participants if the data would personally identify them3. How to get consent from people with disabilities, children and vulnerable adults
2.2 Ethics	Apply ethical considerations in designing and conducting research	<ol style="list-style-type: none">1. What participants should be aware of before the research, including:<ul style="list-style-type: none">– what they are going to be asked– how their information will be used– whether there will be observers– whether the session will be recorded2. Risks and benefits3. Justice (for example, research should address questions relevant for the group)4. Available support5. Appropriate behaviour, language, actions and location
2.3 Safety	Maintain safety when working with participants and their data	<ol style="list-style-type: none">1. Physical and psychological safety2. Making sure participants data is safe3. Planning research to not waste participants' time4. Representing participants accurately5. Handling sensitive data shared by participants

Topic title	Topic learning objectives	Critical content
2.4 Recruitment	Recruit the right participants for research	<ol style="list-style-type: none"> 1. Avoiding bias in recruitment, including: <ul style="list-style-type: none"> – using a variety of user research activities and recruitment approaches – including people with disabilities and limited digital and literacy skills – avoiding over recruiting people with flexible work patterns – recruiting those who could be considered ‘edge cases’ 2. Things to consider when recruiting participants with disabilities, including: <ul style="list-style-type: none"> – their preferred method of contact – need for any communication support – use of any assistive technology – printing paperwork, such as consent forms in a specific format
2.5 Incentives	Explain the things to consider when offering incentives	<ol style="list-style-type: none"> 1. Recognising whether to pay incentives, including: <ul style="list-style-type: none"> – checking the National Statement of Ethical Conduct in Human Research document to help guide decisions 2. Types of research where incentives may not be appropriate 3. If paying incentives, factoring them into the research proposal and budget 4. Deciding on the type of incentive to offer, including: <ul style="list-style-type: none"> – using a recruitment agency or recruiting directly 5. Deciding criteria for incentives <ul style="list-style-type: none"> – type of participant – research session duration 6. Seeking advice from agencies or organisations on their practices 7. Considering expenses to help participants with disabilities who take part in research 8. Ensuring cash incentives are handled separately to research activities

Unit 3. User research in the different design and delivery phases

Learning objective: Executing user research throughout the development phase

Topic title	Topic learning objectives	Critical content
3.1 User research in discovery	<p>Describe the purpose of user research in discovery</p> <p>Identify user groups to conduct research with</p> <p>Select the user research activities in discovery</p> <p>Describe the user research activity outcomes</p>	<ol style="list-style-type: none">1. The aim of user research in discovery, including:<ul style="list-style-type: none">– finding the users problem by observation performing qualitative research to see how users do things and the barriers they face2. Who to research with, including<ul style="list-style-type: none">– range of users, those with disabilities and low digital skills– people who provide the service or who support the users3. Interviewing users in discovery<ul style="list-style-type: none">– interviewing users to understand the limitations of the service– how staff explain the complexities– undocumented workarounds that people use to get things done4. Conducting research activities to learn about users in discovery, including:<ul style="list-style-type: none">– mapping the user journey of people who want to do the service based task– examining existing data and reviewing research to avoid bias and help team build understanding of the users5. Outcomes of researching in discovery, including:<ul style="list-style-type: none">– users' touchpoints as they try to achieve their goal, (for example, journey maps, service maps or mental models)– descriptions of different users, (for example, personas)– sets of needs and task models for different types of users– insights about users gained from analysing the research– a list of research gaps of the current research and opportunities for further research– using profiles combined with real stories from users the team has met– ongoing research to understand evolving needs

Topic title	Topic learning objectives	Critical content
3.2 User research in alpha	<p>Describe the purpose of user research in alpha</p> <p>Identify user groups to conduct research with</p> <p>Select user research activities in alpha</p> <p>Describe the user research activity outcomes</p>	<ol style="list-style-type: none"> 1. The aim of user research in alpha, including: <ul style="list-style-type: none"> – Helping to improve team’s understanding of the users and their needs by testing a range of design ideas and prototypes – exploring hypotheses and prototypes 2. Who to research with, including: <ul style="list-style-type: none"> – range of users, including people with a range of visual, hearing, motor and cognitive impairments 3. How to do user research in alpha, including: <ul style="list-style-type: none"> – getting rid of prototypes and ideas if they don’t meet user needs – task based testing to understand which version is most effective – testing prototypes with users – using insights to iterate the design and test again with users 4. Conducting research activities to learn about users and the design ideas in alpha, including: <ul style="list-style-type: none"> – using interviews and observations to deepen understanding of the users’ lives – trying out design concepts with likely users to see how they meet user needs – testing interactive prototypes to explore the usability of different designs – combine testing the prototype with discovery style interviews to continue understanding user needs 5. Outcomes of researching in alpha, including: <ul style="list-style-type: none"> – a better understanding of the users’ needs, including their support and access requirements – feedback on how well the designs work for users – helpful insight into usability issues related to layout, functionality and content

Topic title	Topic learning objectives	Critical content
3.3 User research in beta	<p>Describe the purpose of user research in beta.</p> <p>Select user research methods for a working beta service</p> <p>Describe the user research activity outcomes</p>	<ol style="list-style-type: none"> 1. How to do user research in beta, including: <ol style="list-style-type: none"> a. Researching while building the service: <ul style="list-style-type: none"> ▪ doing research like done in alpha but aiming to refine a solution for launch ▪ task based usability testing with a range of users ▪ deciding on hypotheses (design ideas) ▪ accessibility testing with people who have access needs ▪ commissioning an external accessibility review before putting the service into a working beta b. Researching with users of a working service, including: <ul style="list-style-type: none"> ▪ adding analytics (including reporting KPIs to the DTA's Performance Dashboard) ▪ interviewing and shadowing real users ▪ multivariate testing ▪ face-to-face and remote usability tests ▪ accessibility audit to uncover accessibility issues and get fixes ▪ private or public beta tests of the end-to-end service and support options with real users ▪ web analytics, performance/platform analytics, back-office data to measure service performance ▪ other digital platforms, including smart device apps, retail shop fronts, and non-digital channels ▪ surveys or follow-up interviews for detailed feedback from service users 2. Outcomes of researching in beta, including: <ul style="list-style-type: none"> – more information about how different kinds of users experience the services – the usability and accessibility issues to fix – ways to improve the service

Topic title	Topic learning objectives	Critical content
3.4 User research in live	<p>Describe the purpose of user research in live</p> <p>Select user groups to conduct research with</p> <p>Select user research activities in live</p> <p>Describe the user research activity outcomes</p>	<ol style="list-style-type: none"> 1. The aim of user research in live, including: <ul style="list-style-type: none"> – Assessing the experience of using the service and understanding evolving user needs – testing new features or improvements – how to do user research in live 2. Who to research with <ul style="list-style-type: none"> – researching with broad range of users, including those with limited digital access and confidence – people with a range of visual, hearing, motor and cognitive impairments – people who use assistive technologies 3. Conducting research activities in live, including: <ul style="list-style-type: none"> – reviewing web analytics and back-office data to measure service performance – surveys or follow-up interviews to collect detailed feedback on the service – interviews and observations to get a deeper understanding of problems users share – face-to-face and remote usability tests for added or changed features – multivariate testing 4. Outcomes of researching in live, including: <ul style="list-style-type: none"> – recognising how different kinds of users experience the service – insights into usability and accessibility issues and how to fix them

Unit 4. Methods and tools of user research

Learning objective: Applying common methods and tools.

Topic title	Topic learning objectives	Critical content
4.1 Selecting the right research method	Define a technique to help in applying a user research method Identify the intended stage and purpose for each method	<ol style="list-style-type: none">1. To know when to use which method, use a 3-dimensional framework with the following axes:<ul style="list-style-type: none">– attitudinal vs behavioural– qualitative vs quantitative– context of use2. Moderated methods of collecting data, include but are not limited to:<ul style="list-style-type: none">– experience mapping– in-depth interviews– ethnographic field studies– contextual inquiry– card Sorting3. Unmoderated methods of collecting data, include but are not limited to:<ul style="list-style-type: none">– surveys– diary and camera studies– email surveys– intercept studies
4.2 Triangulation in user research	Describe the value of triangulation in ensuring a stable, solid research design	<ol style="list-style-type: none">1. Explain why to triangulate in user research, including:<ul style="list-style-type: none">– using qualitative and quantitative methods in connection with each other– superseding the limitations of one method with the strengths of another method

Topic title	Topic learning objectives	Critical content
4.3 Working as a team to find answers to research questions	Recognise the best time to capture research questions	<ol style="list-style-type: none"> 1. When to capture research questions for a sprint, including: <ul style="list-style-type: none"> – at the start of a new stage of the service design and delivery process – re-visiting and refining questions as the team learns more about the users and service – understanding what the team wants to learn and how this changes over time 2. Reviewing the problem 3. Capturing the questions 4. Prioritising the questions, including: <ul style="list-style-type: none"> – Deciding which questions to focus on in the next sprint
4.4 Contextual research and observation	<p>Define what is contextual research and when to conduct it</p> <p>Conduct a contextual research session</p>	<ol style="list-style-type: none"> 1. What is contextual research 2. When to do contextual research, including: <ul style="list-style-type: none"> – understanding the problem the service is trying to solve – using data to see how people use the service in a real-life context 3. How to do contextual research, including: <ul style="list-style-type: none"> – planning the research and designing the visits – working in pairs – creating a discussion guide – doing the research – using the results to create an experience map showing how people carry out the activity that is being researched

Topic title	Topic learning objectives	Critical content
4.5 Creating a journey map	<p>Describe the purpose of a journey map</p> <p>Create an experience map</p> <p>Explain how journey maps relate to service design maps</p>	<ol style="list-style-type: none"> Using journey maps to sketch the complete journey, including: <ul style="list-style-type: none"> how users experience the current service and how things do or don't work interdependencies and pain points what users do, think and feel in response to their experience Creating experience maps with the team, including: <ul style="list-style-type: none"> preparation and identifying common stages building up the experience and sharing the live map with the team drawing a detailed map sharing a summary map (for example stages and key findings, images and quotes) List how journey maps can support service designs maps, including: <ul style="list-style-type: none"> Journey maps focus on revealing the end-to-end of the users' interaction Service design maps focus on revealing the linkages between the user's experience and the back-end services that enable it While journey mapping help surface user experiences, service maps help evidence the reality of the organisation
4.6 Conducting pop-up research	<p>Describe a pop-up research</p> <p>Explain pop-up research stages</p>	<ol style="list-style-type: none"> What are the types of pop-up research? When pop-up research works best How to do pop-up research, including: <ul style="list-style-type: none"> planning the visit and working pairs setting up and finding participants doing the research and packing up

Topic title	Topic learning objectives	Critical content
4.7 Taking notes and recording user research sessions	<p>Define the process of taking notes</p> <p>Explain the process of audio, video and screen recording</p>	<ol style="list-style-type: none"> 1. What can you use to document findings 2. Privacy and consent 3. Anonymous notes and recording, including: <ul style="list-style-type: none"> – inviting an observer as a note-taker – recording observations rather than personal interpretations 4. How photos can add value to findings and help the team and stakeholders 5. Audio, video and screen recording in research sessions, including: <ul style="list-style-type: none"> – recording telephone calls and getting transcripts – videoing outside labs – recording participants who use screen readers or interpreters – using screen-sharing tools to record remote research sessions
4.8 Using in-depth interviews	<p>Describe the process of conducting a complete in-depth interview</p>	<ol style="list-style-type: none"> 1. Planning an in-depth interview, including: <ul style="list-style-type: none"> – creating structure for each topic – making a discussion guide – getting a discussion guide peer reviewed 2. Conducting the interview, including: <ul style="list-style-type: none"> – getting informed consent – focusing on stories and real examples – avoiding questions that aren't based on previous behaviour, for example 'how might you' or 'how would you' – reserving time to ask questions – explaining what will happen next – storing collected personal data

Topic title	Topic learning objectives	Critical content
4.9 Using moderated usability testing	Demonstrate the process of moderated usability testing	<ol style="list-style-type: none"> 1. Planning moderated usability testing, including: <ul style="list-style-type: none"> – deciding on the prototype to focus on – recruiting research participants and choosing locations – arranging interpreters to help participants if needed – inviting observers and arranging a note taker for each session 2. Designing the tasks, including: <ul style="list-style-type: none"> – setting test tasks and giving users several small tasks – creating a discussion guide and an introduction script – descriptions of test tasks along with instructions – a planning checklist 3. Conducting a session, including: <ul style="list-style-type: none"> – things to explain participants when introducing tasks – knowing when it is appropriate to interrupt a participant – using real data or dummy data – researching with assistive technologies

Unit 5. Conducting user research

Learning objective: Performing user research using appropriate methods in the service design context.

Topic title	Topic learning objectives	Critical content
5.1 Planning user research for the service	Define the research objectives and determine the approach	<ol style="list-style-type: none">1. Planning user research at the start of each development phase, including:<ul style="list-style-type: none">– updating the plan as you learn more about users2. Agreeing on the objectives and deciding the approach to take, including:<ul style="list-style-type: none">– deciding the objectives and approach– mapping out rounds of research– involving the team– agreeing how to feed the findings into the teams agile tools– ensuring a space for research– sharing findings with the team and wider stakeholders in events
5.2 Developing a round of user research	Construct a user research plan	<ol style="list-style-type: none">1. Planning with designers in the team for different users and stages of the service design and delivery process, including:<ul style="list-style-type: none">– setting research objectives– finding participants– planning the session schedule– arranging recording and note-taking– practising– inviting observers who would benefit from observing the sessions (designers, products manager)– planning consent based on type of research and cohort

Topic title	Topic learning objectives	Critical content
5.3 Choosing a location for user research	Identify accessible locations for rounds of user research	<ol style="list-style-type: none"> 1. Choosing the best locations for user research, including: <ul style="list-style-type: none"> – meeting rooms, research studios or labs – participants’ homes or workplaces – public spaces (pop-up research) – personal offices (using laptops or phones for remote research)
5.4 Finding user research participants	Identify different kinds of people who need the service	<ol style="list-style-type: none"> 1. Specifying target groups 2. How to outline the participant criteria <ul style="list-style-type: none"> – using existing research and service data – behaviors, attitudes and motivational traits. 3. Factors to consider while recruiting <ul style="list-style-type: none"> – age, gender, culturally and linguistically diverse backgrounds and access to documentation or systems 4. Finding participants for research <ul style="list-style-type: none"> – using a research recruitment agency and inviting existing users
5.5 Writing a recruitment brief	Create instructions for recruiting participants	<ol style="list-style-type: none"> 1. Listing the contents of a recruitment brief, including: <ul style="list-style-type: none"> – research dates, including times and length of each session – research location/s – the number of participants to recruit (including sample sizes) – a description of the types of people to recruit (referred as recruitment criteria) – incentives (see unit 2) 2. How to review a screener based on the recruitment criteria, including: <ul style="list-style-type: none"> – ensuring the screener matches the points included in the brief – requesting standard questions that exclude people likely to be recruited

Unit 6. Analysing and presenting user research findings

Learning objective: Sharing user research needs to decision makers and stakeholders.

Topic title	Topic learning objectives	Critical content
6.1 Analysing a user research session	Filter , organise and interpret data to produce useful insights	<ol style="list-style-type: none">1. How to plan an analysis session, including:<ul style="list-style-type: none">– inviting the people who observed the research to take part in the analysis to reduce the risk of researcher bias– deciding the next plan of action as a group– determining how much time to spend on analysis and research2. Applying a process to gather observations quickly and easily3. Steps to extract observations and create themes, for example:<ul style="list-style-type: none">– common topics, such as identity and delivery– common user behaviors4. Determining findings<ul style="list-style-type: none">– reviewing the notes in each group to determine the observations– writing findings as short statements that summarise what has been learned5. Using findings to make decisions or new research plans, including:<ul style="list-style-type: none">– new design ideas, things to change in a prototype and test in research– new user stories to add to the backlog– strategic insights to develop user needs or service roadmap

Topic title	Topic learning objectives	Critical content
6.2 Sharing the findings	Present user research findings	<ol style="list-style-type: none"> Depending upon how the research is carried out, sharing it with: <ul style="list-style-type: none"> – stakeholders – other researchers – service teams – users and members of the public Sharing research findings, including: <ul style="list-style-type: none"> – presenting findings at showcases or research share backs – updating the research wall – presenting videos of the research – creating posters with quotes from participants – blogging on a department website Presenting findings, using slide decks or similar <ul style="list-style-type: none"> – slide decks can be shared and understood easily by people