APP BUILDING: STRESS LESS!

Levels 7-8

Unit Overview

The purpose of this unit is to equip students with identifying common emotions they feel on a regular basis and using digital technology to help them cope with negative emotions. Students will design an app that will help them identify and manage personal stressful situations. This app with be personalised to meet the needs of emotions they most identify with.

The unit will commence by students identifying a range of common negative emotions and the impact these emotions have on their wellbeing. They will develop knowledge around the different strategies used to help and cope with these emotions and begin to understand which strategy best align with their wellbeing. Students will investigate and look at current apps and look at how they support promote healthy wellbeing for their users. They will use current digital solutions and their own ideas to develop their personalised app.

Curriculum Targeted Areas

The digital technology is central to this unit of work. Areas of interest may include:

- Design and Technology
- Personal and Social Capability
- Critical and Creative Thinking

Further investigation into these areas is required to ensure they align with the following activities. Tasks may need to be modified to ensure Content Descriptions and Achievement Standards are met.

Australian Curriculum Alignment

The following sessions have been created using the Australian Curriculum: Digital Technologies Curriculum. Activities may need to be modified to ensure state Digital Technologies Curriculum Standards/Syllabus are met. ACS has support and documents to help align this unit to other Digital Technology Curricula.

Session

'Session' has been used to define the order of tasks to complete the unit. It does not define a set time required to complete the task. Time allocated to complete a session is the teacher's discretion. This allows for flexibility for to drive the duration of the task and make modifications if necessary. Sessions can be merged into one allocated class period or may run over multiple periods.

APP BUILDING: STRESS LESS!

Levels 7-8

Key Preparation

General Purpose Programming Languages

This unit does not include general purpose programming language. The primary focus is design thinking and using the skills of design to create a digital solution. General purpose programming is not a focus for this unit. The creation of 'Stress Less!' ensures other areas of the curriculum have been targeted and provide rich assessment tasks.

App building Programs

Thunkable is an example of a platform that can be used to create the 'Stress Less!' App. The program to create the app will depend on the school's resources and access to digital technology. Investigation into other platforms may be required if Thunkable is not suitable. This program is best suited to students would have already some skill and knowledge with coding. To support the use of Thunkable, videos have been collated to help understand coding behind different components used to develop 'Stress Less!'. It is recommended to watch these videos to gain sufficient knowledge on the functions and capabilities within the platform. These videos can also be used as resources to pass onto students. The Thunkable community contains tutorials to help with functions that may go beyond the content provided.

Code.org

For any students that are being introduced to coding. Code.org has a plethora of activities and a platform to design apps.

App examples to promote wellbeing

Healthy eating
- That Sugar App

Mental Wellbeing
- Happify

Overall Wellbeing
- Mindbody
- Whats Up?

Meditation
- Stop, breathe think
- DreamyKid

Range of apps
- Suggestions from Vic Health

Exercise
- Zombies, Run!
- Charity Miles

APP BUILDING: STRESS LESS!

Levels 7-8

Key Understandings	Key Questions
Students will: ▪ Analyse how current digital technology is used to help promote positive wellbeing. ▪ Design and develop an app based on identifying strategies to deal with stressful situations and negative emotions. ▪ Evaluate and analyse their app based on a set criterion.	▪ How can we use digital technology to help us cope with negative emotions? ▪ What digital technology is currently available to help us? ▪ What type of app would you create to help you cope with emotions you identify with? ▪ What functions are necessary for your app to work? ▪ What content will you use in your app? How will you use texts, images, videos and sound in your app? ▪ How does your app function? ▪ How have you taken into consider user experience? ▪ If you had a chance to redesign your app, what would you do differently and the same?

Key Vocabulary
Collaboration, protocols (ethical, social and technical protocols), digital solutions, functional requirements, constraints (social, technical, economic environmental), user experience, visual programming, RGB, binary code, algorithms, user input, branching, iteration

APP BUILDING: STRESS LESS!

Levels 7-8

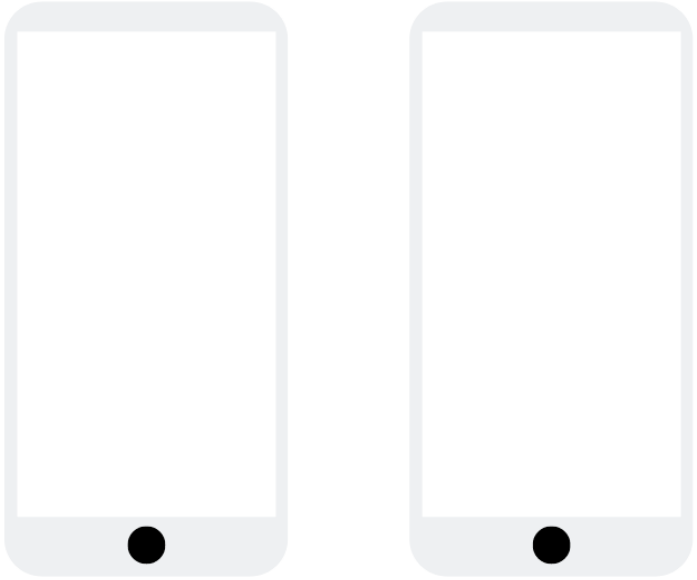
Session Number	Session Topic Focus	Learning Intention and Success Criteria	Introduction/Teacher Instruction	Whole Class Activity
1.	Collaboration	**Learning Intention** Students will generate and adhere to protocols when working in online spaces. **Success Criteria** I can create a guideline that I will abide by when using digital technology to work on my app.	Introduce students to a digital collaborative space. Discuss the right and wrong way to use this space.	Each group creates a guideline to include social, ethical and technical protocols to abide by during their time working on an app and working with others in the class.
Session Resources	**Student Resources** • ACS Student Resource: Online Collaboration		**Teacher Resources** • ACS Teacher Resource: Online Protocols	
2.	Identifying common emotions	**Learning Intention** Students will identify different stresses and emotions they experience in their life and identify techniques help cope with the negative emotions. **Success Criteria** I can identify 5 emotions that I can relate to and identify coping mechanisms and strategies to help me through these negative emotions.	Discuss different types of emotions they feel in their everyday life. (these can be positive and negative) and discuss different coping techniques or strategies that help to the negative emotions turn into positive ones.	Students make a list of the top five (5) emotions they connect with themselves. They also identify different strategies to help them through those negative experiences.
Session Resources	**Student Resources** • Very Well Mind – How to Deal with Negative Emotions • Life Hack – How to Handle Negative Emotions • Psychology Today – Ways to Get Your Unwanted Emotions Under Control • Kids Helpline – Coping with Emotions		**Teacher Resources** • Resources that explain strategies for dealing with emotions	

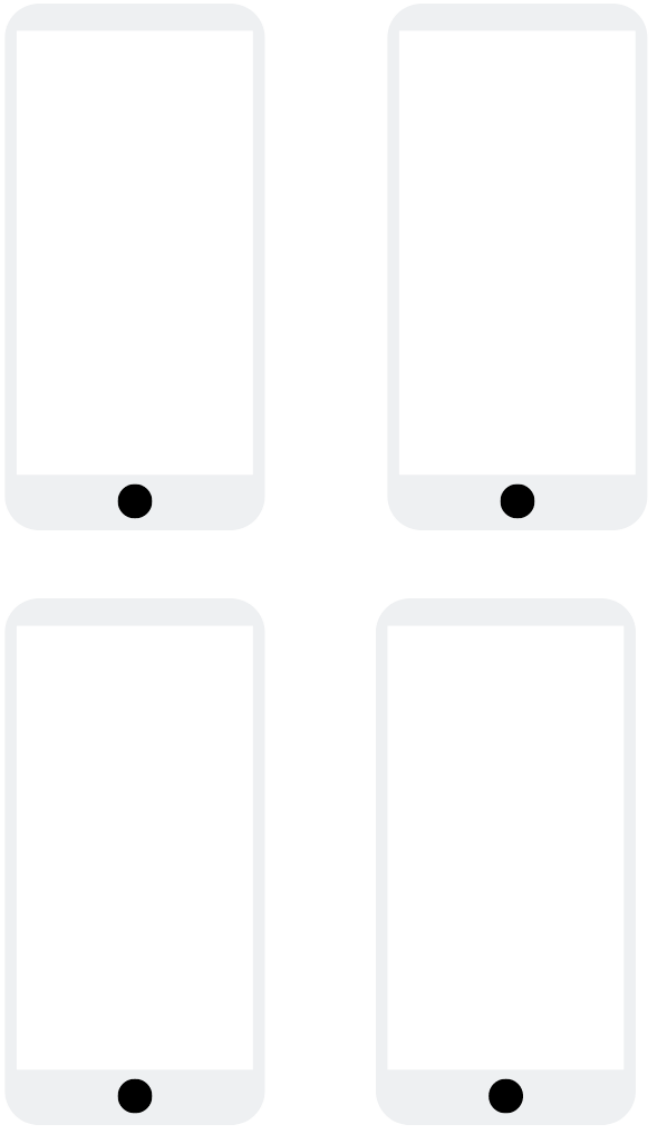
Session Number	Session Topic Focus	Learning Intention and Success Criteria	Introduction/Teacher Instruction	Whole Class Activity
3.	Digital Technology and wellbeing	**Learning Intention** Students will explore and evaluate current technologies that promote wellbeing. **Success Criteria** I can evaluate how current technologies are used to promote positive wellbeing.	Together, look an app that has been developed specifically for mindfulness. Complete Existing App Evaluation together.	Students are given a list of apps that are used to help with wellbeing. They complete the evaluation form and present the information to the class.
Session Resources	**Student Resources** • Existing App Evaluation (located after the session/lesson information)		**Teacher Resources** • List of apps used to promote wellbeing (located in Key Preparation) • ACS Teacher Resource: Real World Problems	
4.	App Design	**Learning Intention** Students will begin to evaluate their app ideas based on functional requirements and constraints. **Success Criteria** I can create ideas about my app and evaluate these ideas based on functional requirements and different constraints.	As a class complete the App Design Evaluation on the topic: Building a House. This will allow to look at all the different considerations and constraints there are when building a house.	Using the same model to 'build a house' students work in small groups to complete the evaluation form relating to their own app. Firstly, they given the opportunity to roughly brainstorm different ideas about their app. Then, students will evaluate these ideas.
Session Resources	**Student Resources** • Building a House Brief with Prompts (located after the session/lesson information) • Student App Design Brief (located after the session/lesson information)		**Teacher Resources** • ACS Teacher Resource: Real World Problems	

Session Number	Session Topic Focus	Learning Intention and Success Criteria	Introduction/Teacher Instruction	Whole Class Activity
5.	App Design Storyboard	**Learning Intention** Students will create a story board that visualises their app. **Success Criteria** I can create a storyboard to visually represent my app.	Take an app that was evaluated and assessed in a previous lesson and create a story board of one or two screens. Discuss with students the user experience and why it is important to design an app with the user in mind.	Students create a storyboard of their app to include: • Front page • Menu • One coping mechanism Students justify how they have considered and implemented user experience into their designs. If time permits, continue with the story board and connect pages and emotions together. **Note: If there is enough time, students can continue to design more pages for their chosen coping mechanism. This will be dependent on the amount of time allocated for this session.*
Session Resources	**Student Resources** • Storyboard (located after the session/lesson information)		**Teacher Resources** • ACS Teacher Resource: User Experience	
6.	App Development	**Learning Intention** Students will use digital program and create their app. **Success Criteria** I can code and create the functions I designed to create my app.	Prior to commencing the app development, students will create a list of skills they will be required to learn when using Thunkable. This list will help them design a process to code the screens for their app. This checklist can also be used to help them work with others in their class who will also need to develop the same skills.	Students will commence programming their app. They will work through the tasks they need to complete based on the skills check list they completed.
Session Resources	**Student Resources** • Thunkable Skills Check List		**Teacher Resources** • ACS Teacher Resource: Algorithms • Thunkable Skills Check List	

Session Number	Session Topic Focus	Learning Intention and Success Criteria	Introduction/Teacher Instruction	Whole Class Activity
7.	Binary Code	**Learning Intention** Students will explain the RGB format to represent colours in a digital system. **Success Criteria** I can explain how RGB format is used to represent colour in digital systems.	Students take time to colour in a hard copy mandala. They discuss the types of colours they have used. Continue a discussion on what the mandala would look like if it was represented in digital systems.	Students investigate how colours are represented in Thunkable. They make notes on what colour they have chosen for their app and how that translates to RGB in digital systems.
Session Resources	**Student Resources** • ACS Student Resource: RGB • Mandalas For Free • Kripalu Mandala Colouring In Book • Mandala Maker • Mandalas Drawings		**Teacher Resources** • ACS Teacher Resource: Binary Code	
8.	Evaluation	**Learning Intention** Students will evaluate their app based on a set criterion. **Success Criteria** I can evaluate my app following a set of questions and prompts.	Students share their work with their peers to demonstrate how their app works.	Students complete a self-evaluation form. Working in small groups online, students evaluate each other's apps. Students compare the group evaluations to their self-evaluation and evaluate how future developments could be altered.
Session Resources	**Student Resources** • Final Evaluations: Self-Evaluation and Group Evaluation (located after the session/lesson information)		**Teacher Resources** • ACS Teacher Resource: Evaluating Digital Solutions	

Student App Design





Design Notes

Technical Notes

RGB:

APP BUILDING: STRESS LESS!

Levels 7-8

Existing App Evaluation		
Topic	**Questions**	**Evaluation**
App Basics	What is the name of the app and who or what company was responsible for created it?	
App explanation	In 3 sentences or less explain the idea behind the app. What is the primary function of the app?	
Problem solving	What problem is the app trying to help solve? What need is it meeting? How is this innovative?	
Functional requirements	Briefly explain how the home, page and 3 other screens operate. What are the functional requirements (what are the must haves of the app to make it work)?	
Technical constraints	Did you have any issues that elated to you using the app? How did the app perform – was it slow to load? Did everything load correctly? Did it crash at any stage? How much memory did the app take up?	
User Experience and Usability	Is your experience using this app a positive one? Are there any errors or glitches in the app? What seemed out of place? Did you like where buttons and links were placed? Any buttons or functions that didn't work properly? Any broken links? Looking at the design, what are 3 things you like about the app? What are 2 things you did not like about the app and explain your answer.	
Reflection	Does it remind you of another app or digital platform you have used before? What will you take away from this design and use in your design?	

APP BUILDING: STRESS LESS!

Levels 7-8

You've been asked to build a house - design a house for a family with a blind child and have $500000 of savings to spend. Based on the following criteria what are the issues and things you need to consider:

Building a house		
Requirements and constraints	**What is means**	**Focus Questions (based on building a house)**
Functional requirements	This refers to parts of a house that fundamental to having a house. Consider 'big picture' concepts first rather than nitty gritty (to get the conversation flowing).	What are 2 or 3 things that you know needs to be included to build a house? If you could have anything in your house, what would be your 5?
Economic Constraints	This refers to costs that are involved. It looks at your budget and how your budget will impact your product.	What type of budget have you got? Do you think you would have enough money to have those top 5 items with $20,000. How would you adapt based on your budget?
Environmental Constraints	This refers to the type of issues that might happen because of your surroundings. Examples include: weather and changes in weather, noise (especially if you are living in the city).	How is your house ready for extreme hot weather? How is your house ready for extreme cold weather? Pick an area you'd like to build the house – what are issues that might come about?
Social Constraints	This refers to surroundings imagine building a house in the middle of nowhere! This is about meeting your needs because you will be living in the home.	What types of things would like to be near? How have you considered your neighbours?
Technical Constraints	This refers to the types of things that will impact the build. There might be a connection between what you wanted (functional requirements) to what can actually be delivered.	Can the functional requirements you identified actually be met? What requirements do you need to change?
Usability Constraints	This refers to the ease of using the house. When building a house, builders need to ensure doorways are tall enough, that the windows open and close and the are situated in the right spot.	Design a space in your house in more detail. Have you thought of all the practical things needed? Eg; design a kitchen – do you think of power points? Heights of benches?

<table>
<tr><th colspan="3">Student App Design Evaluation</th></tr>
<tr><th>Topic</th><th>Questions</th><th>Evaluation</th></tr>
<tr><td>App explanation</td><td>What 5 emotions will you use in your app building?
Why did you choose these 5 emotions?
How will you show management of these emotions?
What images, or videos do you need to find or prepare?</td><td><table><tr><th>Emotion</th><th>Management</th></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></td></tr>
<tr><td>Problem solving</td><td>How might the user be feeling before they use your app?

How do you want the user to feel after they have used the app?</td><td></td></tr>
<tr><td>Functional requirements</td><td>Briefly explain how the home page and 3 other screens operate.

Colours
Do you have any chosen colours you’d like to use? Why have you chosen those colours?

Title Page/First Screen
Any ideas on how you would like your screen to look?

How will you move between screens?
What will that function look like and where should it be placed?</td><td></td></tr>
<tr><td>Technical constraints</td><td>What issues could come up based on the digital platform you are using? If you have lots of pictures and videos storage is a technical issue.</td><td></td></tr>
<tr><td rowspan="2">User Experience and Usability</td><td>What issues could come up for your user?
How can you stop those issues from happening?

What issues do you need to consider when you will design your app that the user might have when using your app?</td><td></td></tr>
<tr><td>How will you incorporate or adapt the functions from apps currently on the market to your app design?
What is one thing you are really looking forward to build in your app?</td><td></td></tr>
</table>

Student App Design Evaluation	
Questions	**Evaluation**
Self-Evaluation • How successful were you building your app? • How does your app help you? • How could it meet the needs of others? • If you were to develop this app again, what would you do differently? • Where there any design features that you liked from the other apps you evaluated? How could you adapt those to add to your app? • Is there anything that could change or you need to be aware of that could potentially affect your app? What do you have to be mindful of? • What challenged you? How did you overcome those challenges? • What excited you? • What didn't work out for you? • If you had the option to create any app – what would you create? **Group Evaluation** • How does the app meet the needs of the user? • Are there any limitations when using the app? • What makes this app innovative? Did the developer create something that was different to your app? • What type of risks or potential risks that could happen from this app?	

Assessment – Australian Digital Technologies Curriculum			
Content Description	**Session**	**Assessment Piece**	**Assessment Statement**
Investigate how data is transmitted and secured in wired, wireless and mobile networks, and how the specifications affect performance (ACTDIK023)	N/A		
Investigate how digital systems represent text, image and audio data in binary (ACTDIK024)	7	App Design Evaluation	Students examined and explained how the RGB format is used to display colours on digital systems and incorporated this knowledge into their app design.
Acquire data from a range of sources and evaluate authenticity, accuracy and timeliness (ACTDIP025)	N/A		
Analyse and visualise data using a range of software to create information, and use structured data to model objects or events (ACTDIP026)	N/A		
Define and decompose real-world problems taking into account functional requirements and economic, environmental, social, technical and usability constraints (ACTDIP027)	3 & 4	Existing App Evaluation Student App Design Brief	Students evaluated current digital technology used to promote wellbeing based on a set criterion that included functional requirements and constraints. Whilst design their app, students evaluated the functional requirements needed to build a successful app and identified possible constraints with their solutions.
Design the user experience of a digital system, generating, evaluating and communicating alternative designs (ACTDIP028)	5	Storyboard	Students created a storyboard to show the development of their app and demonstrated the importance of user experience in their app creation.
Design algorithms represented diagrammatically and in English, and trace algorithms to predict output for a given input and to identify errors (ACTDIP029)	N/A		
Implement and modify programs with user interfaces involving branching, iteration and functions in a general-purpose programming language (ACTDIP030)	N/A		
Evaluate how student solutions and existing information systems meet needs, are innovative, and take account of future risks and sustainability (ACTDIP031)	8	Final Evaluations: Self-Evaluation and Group Evaluation	Students completed an evaluation and reflected on the development of their digital solution (app).
Plan and manage projects that create and communicate ideas and information collaboratively online, taking safety and social contexts into account (ACTDIP032)	1	Group generated guide on working online	Students developed and followed a set of protocols when working collaboratively in online spaces.

Assessment – Victorian Digital Technologies Curriculum			
Content Description	**Session**	**Assessment Piece**	**Assessment Statement**
Investigate how data is transmitted and secured in wired, wireless and mobile networks (VCDTDS035)	N/A		
Investigate how digital systems represent text, image and sound data in binary (VCDTDI036)	7	App Design Evaluation	Students examined and explained how the RGB format is used to display colours on digital systems and incorporated this knowledge into their app design.
Acquire data from a range of sources and evaluate their authenticity, accuracy and timeliness (VCDTDI037)	N/A		
Analyse and visualise data using a range of software to create information, and use structured data to model objects or events (VCDTDI038)	N/A		
Manage, create and communicate interactive ideas, information and projects collaboratively online, taking safety and social contexts into account (VCDTDI039)	1	Group generated guide on working online	Students developed and followed a set of protocols when working collaboratively in online spaces.
Define and decompose real-world problems taking into account functional requirements and sustainability (economic, environmental, social), technical and usability constraints (VCDTCD040	3 & 4	Existing App Evaluation Student App Design Brief	Students evaluated current digital technology used to promote wellbeing based on a set criterion that included functional requirements and constraints. Whilst design their app, students evaluated the functional requirements needed to build a successful app and identified possible constraints with their solutions.
Design the user experience of a digital system, generating, evaluating and communicating alternative designs (VCDTCD041)	5	Storyboard	Students created a storyboard to show the development of their app and demonstrated the importance of user experience in their app creation.
Design algorithms represented diagrammatically and in English, and trace algorithms to predict output for a given input and to identify errors (VCDTCD042)	N/A		
Develop and modify programs with user interfaces involving branching, iteration and functions using a general-purpose programming language (VCDTCD043)	N/A		
Evaluate how well student-developed solutions and existing information systems meet needs, are innovative and take account of future risks and sustainability (VCDTCD044)	8	Final Evaluations: Self-Evaluation and Group Evaluation	Students completed an evaluation and reflected on the development of their digital solution (app).

Assessment – New South Wales Technology Syllabus			
Outcomes and Content	**Session**	**Assessment Piece**	**Assessment Statement**
designs, communicates and evaluates innovative ideas and creative solutions to authentic problems or opportunities TE4-1DP	8	Final Evaluations	Students completed an evaluation and reflected on the development of their digital solution (app).
plans and manages the production of designed solutions TE4-2DP			
designs algorithms for digital solutions and implements them in a general-purpose programming language TE4-4DP	N/A		
explains how data is represented in digital systems and transmitted in networks TE4-7DI	N/A		
explains how people in technology related professions contribute to society now and into the future TE4-10TS	N/A		
evaluate how existing information systems meet needs, are innovative, and take account of future risks and sustainability (ACTDEK029, ACTDIP031)	8	Final Evaluations	Students completed an evaluation and reflected on the development of their digital solution (app).
evaluate the suitability of hardware with particular performance characteristics against the needs of different users	N/A		
develop criteria to evaluate design ideas, processes and solutions, the functionality, aesthetics and a range of constraints, eg accessibility, cultural, economic, resources, safety, social, sustainability, technical (ACTDEP038, ACTDIP027, ACTDIP031)	8	Final Evaluations	Students completed an evaluation and reflected on the development of their digital solution (app).
investigate how digital systems represent text, image and audio with whole numbers, for example: (ACTDIK024)	7	App Design Evaluation	Students examined and explained how the RGB format is used to display colours on digital systems and incorporated this knowledge into their app design.
explore how data is transmitted and secured in wired, wireless and mobile networks ACTDIK023)	N/A		
design the user experience of a digital solution, generating, evaluating and communicating alternative ideas (ACTDEP036, ACTDIP028, ACTDIP032)	5	Storyboard	Students created a storyboard to show the development of their app and demonstrated the importance of user experience in their app creation.
collect and access data from a range of sources (ACTDIP025)	N/A		
evaluate the authenticity, accuracy and timeliness of data (ACTDIP025)	N/A		
interpret and visualise data using a range of software to create information, for example: (ACTDIP026)	N/A		
model objects or events using structured data (ACTDIP026)	N/A		
plan and manage projects individually and collaboratively (ACTDEP039)	1	Working online	Students developed and followed a set of protocols when working collaboratively in online spaces.
implement and modify programs involving branching, iteration and functions in a general-purpose programming language (ACTDIP030)	N/A		
implement a functioning user interface (ACTDIP030)	6	App prototype	Students created a digital prototype of their app.
evaluate how student solutions address defined functional requirements and constraints (ACTDIP031)	3		Students evaluated current digital technology that promote wellbeing
trace algorithms to predict output for a given input and to identify errors (ACTDIP029)	N/A		
identify social, ethical and cyber security considerations of digital solutions	N/A		

Assessment – Western Australian Digital Technologies Syllabus			
Year 7			
Content Description	**Session**	**Assessment Piece**	**Assessment Statement**
Different types of networks, including wired, wireless and mobile networks (ACTDIK023)	N/A		
Hardware components of a network (ACTDIK023)	N/A		
Digital systems represent text, image and audio data (ACTDIK024)	7	App Design Evaluation	Students examined and explained how the RGB format is used to display colours on digital systems and incorporated this knowledge into their app design.
Explore how to acquire data from a range of digital sources (ACTDIP025)	N/A		
Create information using relevant software, and create data to model objects and/or events (ACTDIP026)	N/A		
Design the user experience of a digital system (ACTDIP028)	5	Storyboard	Students created a storyboard to show the development of their app and demonstrated the importance of user experience in their app creation.
Create digital solutions that include a user interface where choices can be made (ACTDIP030)	5	Storyboard	Students created a storyboard to show the development of their app and demonstrated the importance of user experience in their app creation.
Create and communicate information collaboratively online, taking into account social contexts (ACTDIP032)	1	Working online	Students developed and followed a set of protocols when working collaboratively in online spaces.
Define and break down a given task, identifying the purpose (WATPPS39)	N/A		
Consider components/resources to develop solutions, identifying constraints (WATPPS40)	N/A		
Design, develop, review and communicate design ideas, plans and processes within a given context, using a range of techniques, appropriate technical terms and technology (WATPPS41)	5	Storyboard	Students created a storyboard to show the development of their app and demonstrated the importance of user experience in their app creation.
Follow a plan designed to solve a problem, using a sequence of steps (WATPPS42)	N/A		
Safely make solutions using a range of components, equipment and techniques (WATPPS43)	6	App prototype	Students used a range of software and hardware to create a digital prototype of their app.
Independently apply given contextual criteria to evaluate design processes and solutions (WATPPS44)	8	Self-Evaluation and Group Evaluation	Students completed an evaluation and reflected on the development of their digital solution (app).
Work independently, and collaboratively when required, to plan, develop and communicate ideas and information when using management processes (WATPPS45)	Throughout the unit	Group and individual tasks	Students worked through numerous tasks (individually and within small groups) to design and create an app.

APP BUILDING: STRESS LESS!

Levels 7-8

Assessment – Western Australian Digital Technologies Curriculum Year 8 Syllabus			
Content Description	**Session**	**Assessment Piece**	**Assessment Statement**
Methods of data transmission and security in wired, wireless and mobile networks (ACTDIK023)	N/A		
Specifications of hardware components and their impact on network activities (ACTDIK023)	N/A		
Binary is used to represent data in digital systems (ACTDIK024)	7	App Design Evaluation	Students examined and explained how the RGB format is used to display colours on digital systems and incorporated it into their app.
Evaluate the authenticity, accuracy and timeliness of acquired data (ACTDIP025)	N/A		
Evaluate and visualise data, using a range of software, to create information, and use structured data to model objects or events (ACTDIP026)	N/A		
Design the user experience of a digital system (ACTDIP028)	5	Storyboard	Students created a storyboard to show importance of user experience in their app creation.
Design plans, using a sequence of steps, and represent them diagrammatically and in English, to solve a problem and to predict output for a given input to identify errors (ACTDIP029)	N/A		
Implement and modify solutions, that include user interfaces within a programming environment, including the need for choice of options and/or repeating options (ACTDIP030)	N/A		
Create and communicate interactive ideas collaboratively online, taking into account social contexts (ACTDIP032)	1	Working online	Students developed and followed a set of protocols when working collaboratively in online spaces.
Investigate a given need or opportunity for a specific purpose (WATPPS46)	5	Storyboard	Students developed an app to support wellbeing.
Evaluate and apply a given brief (WATPPS47)	8	Evaluations	Using the brief, student evaluated their prototype app.
Consider components/resources to develop solutions, identifying constraints (WATPPS48)	N/A		
Design, develop, evaluate and communicate alternative solutions, using appropriate technical terms and technology (WATPPS49)	3 &4	App Design	Students designed an app using storyboards, then developed a prototype to create a digital solution to manage student wellbeing.
Produce a simple plan designed to solve a problem, using a sequence of steps (WATPPS50)	5	Storyboard	Students created a storyboard to show how their app would operate.
Safely apply appropriate techniques to make solutions using a range of components and equipment (WATPPS51)	6	App prototype	Students used a range of software and hardware to create a digital prototype of their app.
Develop contextual criteria independently to assess design processes and solutions (WATPPS52)	8	Self-Evaluation and Group Evaluation	Students completed an evaluation and reflected on the development of their digital solution (app).
Work independently, and collaboratively when required, to plan, develop and communicate ideas and information when managing processes (WATPPS53)	Throughout the unit	Group and individual tasks	Students worked through numerous tasks (individually and within small groups) to design and create an app.