CSTA Standards	Grades 9-10	Mission 1	Mission 2	Mission 3	Mission 4	Remix 1	Mission 5	Mission 6	Remix 2	Mission 7	Mission 8	Remix 3	Mission 9	Remix 4	Mission 10	Mission 11	Mission 12	Remix 5	Mission 13	Remix 6	Mission 14	Remix 7	Mission 15	Remix 8	Mission 16	Final Project
(1) Computing Systems -	3A-CS-01 Explain how abstractions hide the underlying implementation details of computing systems embedded in everyday objects.																									
	3A-CS-02 Compare levels of abstraction and interactions between application software, system software, and hardware layers.																									
	3A-CS-03 Develop guidelines that convey systematic troubleshooting strategies that others can use to identify and fix errors.			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
(2) Networks & the Internet -	3A-NI-04 Evaluate the scalability and reliability of networks, by describing the relationship between routers, switches, servers, topology, and addressing.																									
	3A-NI-05 Give examples to illustrate how sensitive data can be affected by malware and other attacks.																									
	3A-NI-06 Recommend security measures to address various scenarios based on factors such as efficiency, feasibility, and ethical impacts.																									
	3A-NI-07 Compare various security measures, considering tradeoffs between the usability and security of a computing system.																									
	3A-NI-08 Explain tradeoffs when selecting and implementing cybersecurity recommendations.																									
(3) Data & Analysis -	3A-DA-09 Translate between different bit representations of real-world phenomena, such as characters, numbers, and images.																									
	3A-DA-10 Evaluate the tradeoffs in how data elements are organized and where data is stored.																									
	3A-DA-11 Create interactive data visualizations using software tools to help others better understand real-world phenomena.																									
	3A-DA-12 Create computational models that represent the relationships among different elements of data collected from a phenomenon or process.																									
(4) Algorithms & Programming -	3A-AP-13 Create prototypes that use algorithms to solve computational problems by leveraging prior student knowledge and personal interests.				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	3A-AP-14 Use lists to simplify solutions, generalizing computational problems instead of repeatedly using simple variables.									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	3A-AP-15 Justify the selection of specific control structures when tradeoffs involve implementation, readability, and program performance, and explain the benefits and drawbacks of choices made.							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	3A-AP-16 Design and iteratively develop computational artifacts for practical intent, personal expression, or to address a societal issue by using events to initiate instructions.			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	3A-AP-17 Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	3A-AP-18 Create artifacts by using procedures within a program, combinations of data and procedures, or independent but interrelated programs.												X	X	X	X	X	X	X	X	X	X	X	X	X	X
	3A-AP-19 Systematically design and develop programs for broad audiences by incorporating feedback from users.					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

CSTA Standards	Grades 9-10	Mission 1	Mission 2	Mission 3	Mission 4	Remix 1	Mission 5	Mission 6	Remix 2	Mission 7	Mission 8	Remix 3	Mission 9	Remix 4	Mission 10	Mission 11	Mission 12	Remix 5	Mission 13	Remix 6	Mission 14	Remix 7	Mission 15	Remix 8	Mission 16	Final Project
	3A-AP-20 Evaluate licenses that limit or restrict use of computational artifacts when using resources such as libraries.																									
	3A-AP-21 Evaluate and refine computational artifacts to make them more usable and accessible.					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	3A-AP-22 Design and develop computational artifacts working in team roles using collaborative tools.					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	3A-AP-23 Document design decisions using text, graphics, presentations, and/or demonstrations in the development of complex programs.					X			X			X		X	X	X	X	X	X	X	X	X	X	X	X	X
(5) Impacts of Computing -	3A-IC-24 Evaluate the ways computing impacts personal, ethical, social, economic, and cultural practices.																									
	3A-IC-25 Test and refine computational artifacts to reduce bias and equity deficits.																									
	3A-IC-26 Demonstrate ways a given algorithm applies to problems across disciplines.																									
	3A-IC-27 Use tools and methods for collaboration on a project to increase connectivity of people in different cultures and career fields.																									
	3A-IC-28 Explain the beneficial and harmful effects that intellectual property laws can have on innovation.																									
	3A-IC-29 Explain the privacy concerns related to the collection and generation of data through automated processes that may not be evident to users.																									
	3A-IC-30 Evaluate the social and economic implications of privacy in the context of safety, law, or ethics.																									