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| <p style="text-align: center;">A Proposed App: The Campus Life Scheduler</p> <p style="text-align: center;">--Instructions for the App Developers</p> <p style="text-align: center;">Submitted to Mr. Jacky Chan, Project Manager, OSU Special Projects Office</p> <p style="text-align: center;">Submitted by Lyon Kee</p> <p style="text-align: center;">Submitted November 11, 2023</p> <p style="text-align: center;">Wr227z Section #4, fall term 2023</p> |
| <p>Note to the Developers: <i>The Special Projects Office at Oregon State University (OSU), as a part of its annual promotion of student-designed projects, has issued an RFP (Request for Proposals) for 5-page, 500-word descriptions of OSU-based software applications. Proposed “apps” must benefit OSU students and may either be a new design or an improvement to existing software. All proposals must be submitted by October 11, 2023, and these will be reviewed by Mr. Jacky Chan and the staff at the OSU Special Projects Office. App designs will be selected for further development based on their potential usefulness to OSU students—with the design authors notified by October 18, 2023.</i></p> |
| <p>Preface: Lyon Kee - currently a senior majoring in Computer Science at OSU - is proposing the following app: The Campus Life Scheduler. Lyon Kee's Campus Life Scheduler isn't just a planner—it's your campus companion. Stay on top of your schedule, effortlessly coordinate group activities, and navigate campus with ease using the integrated map feature. Plus, receive real-time updates on venue or time changes, ensuring you're always in the loop. Lyon envisions a tool that not only organizes your life but also fosters a connected and informed campus community. Embrace the future of student life management with the Student Life Scheduler.</p> <p>It is recommended that this new app, Lyon Kee's Student Life Scheduler, be the first download for Oregon State newcomers. Unlike the university's event website at https://events.oregonstate.edu/, our app leverages the latest connectivity technologies, outperforming the outdated email systems still in use for campus activities. Serving as a centralized hub, Lyon's creation efficiently addresses the who, what, where, when, and why for the entire Oregon State Community, all at a remarkably low cost compared to the invaluable benefits it delivers. Furthermore, while the website allows users to express interest in events through email, Lyon's app offers real-time efficiency, allowing users to customize their event preferences and serving as the singular point of contact for seamless event signup, check-in, and details viewing. For students, it is an indispensable tool for keeping track of daily lectures, classes, tasks, meetings, office hours, and more. This versatility extends to lecturers, offering them the same efficiency in managing their academic commitments. Notably, it also plays a pivotal role for the campus experience coordinators, fostering collaboration on events and enhancing the overall coordination process. Lyon's app serves as the go-to platform for streamlining communication, optimizing event planning, and ensuring a cohesive and well-managed campus experience for all. If this proposed app is selected by the OSU Special Projects Office for development, Lyon Kee agrees to abide by the contract terms and to consult with the developers.</p> |

Please see “NOTE” page 6 regarding how to get an “A” on the 5-page NST (Instruction Manual).

Overview of the GUI (Graphic User Interface): The Rainwater Resource Tour app should capture all the information found in OSU's current Rainwater Resource Guide brochure (updated February 2021)—found at this URL: <https://fa.oregonstate.edu/sustainability/operations/water>. This three-page brochure is currently available online as a pdf file and includes a campus map with the location of 30 resources in six categories. Ultimately, the Rainwater Resource Tour app should link to OSU's Department of Horticulture web site (<https://horticulture.oregonstate.edu/departments-of-horticulture/research-extension>) and should provide additional information for all 30 rainwater resources—info such as: street address for the nearest building, design intent, capacity, pollution reduction efficiency, soil structures, and/or plant species used in the installation.

The proposed Rainwater Resource Tour app should have three screen levels—as shown immediately below.

| Home Page design | Second Level Screen design | Third level Screen design |
|--|---|--|
|  |  <p>The rainwater collection tank at the OSU Pride Center (1553 SW A Ave, Corvallis, OR 97333) was designed by an engineering student using an old composting bin. Rainwater is used for watering plants around the Pride Center's permaculture garden. See specifications</p> | <p>Rainwater collection tank at the OSU Pride Center (1553 SW A Ave, Corvallis, OR 97333):</p> <ul style="list-style-type: none"> • Design Intent • Tank materials • Tank capacity • Impact on local environment |
| OSU Rainwater Resource Tour App—Expand the map to follow links | OSU Pride Center Rainwater Tank—Resource overviews with spec links | Rain collection specifications—Links to Web Site Detailed Info |

Home Page (GUI) General Instruction #1: The Home Page design of the Rainwater Tour app should be an expandable, navigable version of the campus map that is found in OSU's current Sustainable Stormwater Guide pdf file. This touchscreen should have "dot" links to a second-level description of individual resources. Across the top of the touchscreen should be the title: "OSU Rainwater Resource Tour App."

Home Page (GUI) Specific Instruction #2: The Home Page design of the Rainwater Tour app should include a legend that describes with vivid color codes 30 locations on the OSU-Corvallis campus in six categories:

- Grey location dots/raindrops identifying the location of Sewer Access structures
- Blue location dots/raindrops identifying the location for Rain Gardens
- Red location dots/raindrops identifying the location for Rain Collection stations
- Orange location dots/raindrops identifying the location of Bioswales
- Yellow location dots/raindrops identifying the location of Permeable Pavement areas
- Green location dots/raindrops identifying the location of Green Roof installations.

In the example provided, the User follows a Red location dot to find the Rain Collection tank at the OSU Pride Center.

Please see "NOTE" page 6 regarding how to get an "A" on the 5-page NST (Instruction Manual).

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| Second Level Screen (GUI) General Instruction #3: The Second Level Screen design of the Rainwater Resource Tour app should provide overview information related to each of the specific rainwater resources found on the OSU campus. See the 3-screens example above. This proposed app would provide an overview of all 30 resources currently found on OSU's "Sustainable Stormwater Guide." |
| Second-Level GUI Specific Instruction #4: The Second Level Screen design of the Rainwater Tour app should include a title—in the sample screen provided the title is: " OSU Pride Center Rainwater Tank. " Each resource page, as in the 3-screens example, should include (beneath the title) a color photograph of the rainwater resource. Beneath the photo should be a short summary description of the rainwater resource. At the bottom of the screen should be an obvious link to a third level screen that redirects users to further detailed information—in all cases, this obvious link should be: " <i>See specifications.</i> " |
| Third Level Screen (GUI) General Instruction #5: The Third Level Screen design of the Rainwater Tour app should include the following content: Text at the top of the screen lets the user know what resource they are exploring—in the 3-screens example, the text is: " Links to specification data for the rainwater collection tank at the OSU Pride Center (1553 SW A Ave, Corvallis, OR 97333). " This text/title should be followed by a short list of links to available information regarding the resource—following the links, the user is taken to further information provided by resource owners. |
| Third Level Screen (GUI) Specific Instruction #6: Categories of available information about each specific resource will have to be collected from those who created or maintain the resource. <u>Someone from the developer/programming project team will be responsible for collecting, posting, and linking this information.</u> Information links should be blue italics, versus the black-text resource description. All resource information should be stored on the following website: https://horticulture.oregonstate.edu/departments-of-horticulture/research-extension . |
| Results Summary for the GUI: Users should be able to rapidly navigate from the home page to the second-level overviews to the third-level links to detailed information on the resource owner's website. Navigation includes an expandable, searchable map of the OSU campus—similar navigation to that provided by Google maps. "Back" navigation should be provided at levels two, three AND four! |
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Please see "NOTE" page 6 regarding how to get an "A" on the 5-page NST (Instruction Manual).

Overview for Developers regarding integration testing: To facilitate online tours of the current 30+ Rainwater Resources on the OSU-Corvallis Campus, the proposed app should “leverage” (re-use) Oregon State’s current, online interactive campus map—which has the following features:

- Search for a building
- Highlight Multiple buildings
- View a map to find your way to class and any events
- Drag to pan
- Zoom in and out
- Experience a choice of view
- And many other interactive benefits much like google maps

The OSU-Corvallis Campus map can be found at this URL: <http://oregonstate.edu/campusmap>

Integration Testing of the Home Page—General Instruction #7: The map on the app’s home page should allow the user to tap/select any one of the six categories of Rainwater Resources that are included in the map legend, as described in the GUI. Tap/selecting the “Rainwater Collection” category, for example, would then pinpoint all four Rainwater Collection sites on the OSU Campus map.

Integration Testing of the Home Page—Specific Instruction #8: Users of the app should be able to double-tap to zoom in on any one of the pinpointed sites. A tap/hold on the site of interest would take the user to a second-level screen with a description of the site.

Integration Testing of the Second-Level pages—General Instruction #9: The app’s second-level screens should all include color photos of individual installations. Additionally, the app’s second-level screens should each include a brief description of the site, including the street address. The final element of the second-level screen is an obvious link to a third-level screen: “[See specifications](#)”.

Integration Testing of the Second-Level pages—Specific Instruction #10: Whatever site information that may be missing from the current OSU campus map, must be added to make the app complete. For example, the Oak Creek Center for Urban Horticulture, 844 SW 35th Street, CORVALLIS, OR 97331, has four Rainwater Resources: Rain Gardens, Rain Collection, Permeable Pavement, and Green Roofs. However, the OSU Campus Map does not call out this location—other than identifying four buildings with obscure names like “Fumigatorium & Shop.”

Integration Testing of the Third-Level pages—General Instruction #11: At the top of each of the 30 level-three screens, the name/address of the rainwater resource site is repeated. **(See GUI example.)**

Integration Testing of the Third-Level pages—Specific Instruction #12: The bottom half of the level-three screens includes categories of detailed information about the site—the categories are links to detailed information provided by the owner of the resource and posted to the following website: <https://horticulture.oregonstate.edu/department-of-horticulture/research-extension>. The categories of available detailed information would include specifications such as: design intent, capacity, pollution reduction efficiency, soil structures, and/or plant species used in the installation. These should be provided by the resource owner. **(See Overview of the GUI.)**

Results Summary for Developers regarding integration testing: App users should have the ability to navigate back to the previous level when at level two, three, or from the resource owner's web site.

1. When opening the home page, app users should be able to view all 30 rainwater resources on the OSU campus—these 30 resources should be color-coded per the GUI description.
2. A legend would also allow users to see categories individually—for example, tapping the green Rainwater Collection label on the home page legend would then highlight only the four locations for Rainwater Collection stations on the OSU campus.
3. Using a tap/hold selection, users would then be able to see (one site at a time) rainwater collection information for the following sites:
 - Oak Creek Center for Urban Horticulture, 844 SW 35th STREET, CORVALLIS, OR 97331
 - Energy Center, 3452 SW JEFFERSON WAY, CORVALLIS, OR 97331
 - Kelley Engineering Center, 110 SW PARK TERRACE, CORVALLIS, OR 97331
 - Pride Center, 1553 SW A AVE, CORVALLIS, OR 97333

NOTE: This Canvas file#005 is a model/template! You can replace my words with yours after downloading this template. However, Please DON'T try to complete your NST document final draft until week 2 of fall term 2023--so that you can incorporate Writing PROMPTS 3, 4, and 5!

AND REMEMBER: Don't chose Rainwater Resources on the OSU-Corvallis campus for your NST topic—chose some other topic that is of interest to you—some topic neither identical nor too similar to the instructor's topic! Please email if questions about your topic.

NOTE: Above is a 5-page NST (Instruction Manual) document that describes requirements for a new/improved app that would be of use to OSU-Corvallis students. This 5-page NST document is an instructor-provided model for students to imitate when writing up their own 5-page NST document. Please feel free to cut-and-paste the provided NST content and replace my words with your words. **AND REMEMBER: Don't chose Rainwater Resources on the OSU-Corvallis campus for your NST topic—chose some other topic that is of interest to you—some topic neither identical nor too similar to the instructor's topic! Please email if questions about your topic.**

Each section of the of this 5-page NST model document has a heading that describes the content of the section. Please keep all of the headings as provided. All content under each heading, however, should be written up in your own words—except for the Page 1 italicized section, which can be left as is—used verbatim. As you use this model to create your final draft of the NST—**due Wed11Oct by 1159 PM**—please make sure you have removed all references to the Rainwater Resource Tour app. **Please delete this note from your final draft. Also delete the first line of the header as well as the footer.**

Here is a strategy for writing-up your NST:

- a) Write a draft of your Page 1 **Preface** that describes WHAT your app is and WHY students would use it—**make sure to include the seven (7) elements for the Preface recommended in Canvas file #008, Writing Prompt 3;**
- b) Sketch or mock-up **three screens** (Page 2) that **illustrate** how end-users (OSU-Corvallis students) would navigate through your app to find **one good example** of specific information—the end-user is looking for something in particular—illustrate how do they would use your app to find it;
- c) Write up instructions 1-through-6 describing the appearance, the look-and-feel, of **your app three screens**—this screen appearance description is also known as the GUI (Graphic User Interface);
- d) Write up instructions 7-through-12 describing what **Info/Data** should be available to the end-user if they were to select any of links you have illustrated in **your app three screens**;
- e) Create an **Overview** that introduces **GUI** instructions 1-through-6 as well as a **Results Summary** that emphasizes/reiterates the most important features of **GUI** instructions 1-through-6; and
- f) Create an **Overview** that introduces **Info/Data** instructions 7-through-12 as well as a **Results Summary** that emphasizes/reiterates the most important features of **Info/Data** instructions 7-through-12.

Your instructor is pretty lenient when grading this first paper; however, to get a good (A) grade on this 5-page NST document **due Wed11Oct2023 by 1159PM**, please keep the following in mind:

- 1) Imagine the ideal end-user for your app and also imagine the details your app will provide them. Details make an “A.”
- 2) When you illustrate your three screens, don't start with the login screen—your first screen should have choices for the end-user to make, your second screen should have additional choices for the end-user to make, and your third screen should arrive at a destination (with links provided for further details). Suggest a URL for further details.
- 3) There can be some overlap between the two instruction sets, but not too much. Imagine that you are writing your NST instructions to two different contract developers—Bob is interested in the GUI instructions 1-through-6, and Ruth is interested in the Info/Data instructions 7-through-12. Please focus on describing the appearance/look and feel of your app for instructions 1-through-6. And for instructions 7-through-12, please focus on the information available to the end-users of your app if they were to follow any of the links you describe in your app three screens. **Suggest to Ruth where your app data should be located/sourced, as your app will have to link to one or more web sites—or a database.**
- 4) When writing up your **two Overviews and your two Results Summary sections**, think of the advice often given to public speakers: “Tell your audience what you are about to say, deliver your speech, and then conclude by reiterating what you want your audience to remember.” The **Overview** tells your audience what you are about to say. Each instruction set is, in effect, a speech to a developer. The **Results Summary** reiterates what you want the developers to remember.
- 5) For your final edit before submitting your 5-page NST, please make sure the content of your Page 1 Preface agrees with the content of pages 2-through-5.