BETTER TIPS FOR TAPS

LIBRARY TECHNOLOGY CONFERENCE 2017

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WEB SERVICES & MULTIMEDIA LIBRARIAN
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OVERVIEW

• MOBILE USABILITY TESTING
• MOBILE VS DESKTOP
• SETTING UP THE TEST
• CONDUCTING THE TEST
• DATA ANALYSIS
WHAT IS USABILITY TESTING?
MOBILE USABILITY TESTING IS THE EVALUATION OF A MOBILE WEBSITE ON A DEVICE, SUCH AS A TABLET OR SMARTPHONE.
“USABILITY REALLY JUST MEANS MAKING SURE THAT SOMETHING WORKS WELL: THAT A PERSON OF AVERAGE ABILITY AND EXPERIENCE CAN USE THE THING…”

–STEVE KRUG, *DON’T MAKE ME THINK*
USABILITY CAN DETERMINE IF THE USER’S EXPERIENCE IS SATISFYING OR FRUSTRATING.
USABILITY TESTING IDENTIFIES OBSTACLES THAT USERS MAY ENCOUNTER.
OBSTACLES CAN BE AS SIMPLE AS BROKEN LINKS OR HIGHLIGHTING MORE SERIOUS BUGS IN A WEBSITE.
USABILITY TESTING GIVES INSIGHT TO USER PREFERENCES AND BEHAVIORS
WHY IS USABILITY IMPORTANT?
EXERCISE: MAKE A PB&J SANDWICH

WRITE INSTRUCTIONS DOWN FOR ASSEMBLING A PB&J

YOU HAVE...

– 1 PACKAGE OF A BREAD LOAF
– 1 CONTAINER OF PEANUT BUTTER
– 1 CONTAINER OF JELLY
– 1 KNIFE
WHY IS TESTING USABILITY IMPORTANT?
LIKE PB&J SANDWICHES, WEBSITES DON’T COME WITH INSTRUCTIONS
LIBRARY WEBSITES CAN BE VERY COMPLICATED
IMPROVES PERFORMANCE
KEEPS COST DOWN
TESTING IDENTIFIES WHAT WORKS AND WHAT DOESN’T
IMPROVES EFFICIENCY
SO DEVELOPERS CAN
FOCUS ON OTHER TASKS
DATA-DRIVEN DESIGN DECISIONS CAN BE MADE
REDUCES REWORK OR BIG FIXES
HELPS MAKE DATA-BASED DECISIONS
INCORPORATES THE USER’S PERSPECTIVE AND VOICE
“YOU HAVE TO LOOK AT YOUR SERVICE FROM THE POINT OF VIEW OF SOMEONE WHO KNOWS A LOT LESS THAN YOU AND SEE WHERE THEY’RE COMING FROM.”

-SUMANA HARIHARESWARA
MOBILE VS DESKTOP
WHAT ARE SOME DIFFERENCES BETWEEN MOBILE AND DESKTOP TESTING?
THE MOBILE CONTEXT - THE CIRCUMSTANCES AND ENVIRONMENT A MOBILE DEVICE IS USED.
MOBILE DEVICES ARE PORTABLE AND CAN BE USED ANYWHERE AND ANY TIME.
DESKTOP MACHINES ARE TETHERED.
LAPTOPS ARE NOT AS MOBILE WHEN IN USE.
THE ENVIRONMENT IN WHICH DESKTOP AND LAPTOP WORKSTATIONS ARE STATIC.
MOBILE DEVICES HAVE SMALLER SCREEN SIZES.
SMALLER SCREENS FORCES A DRAMATIC CHANGE TO THE INTERFACE.
WEB PAGE REAL ESTATE AND LAYOUTS ARE MORE RESTRICTIVE IN THE MOBILE CONTEXT.
TOUCH INTERFACE
USERS INTERACT WITH THEIR FINGERTIPS AND NOT WITH A KEYBOARD AND MOUSE.
OPTIMIZE TASKS THAT DOESN’T REQUIRE A KEYBOARD AND MOUSE.
NETWORK ACCESS
DATA TRANSFER IS AT THE MERCY OF CELL PHONE AND WIFI SIGNALS.
LIMIT CONTENT, SUCH AS IMAGES, SO THEY CAN BE DOWNLOADED QUICKLY OVER MOBILE BROADBAND.
TEST SETUP
WHAT ARE THE GOALS OF YOUR TEST?
BEFORE YOU CAN TEST, IT’S IMPORTANT TO IDENTIFY YOUR GOALS.
EXAMPLE GOAL:
YOUR DESKTOP SITE HAS BEEN MOBILE OPTIMIZED AND YOU WANT TO SEE HOW WELL THAT FARES WITH SMARTPHONE USERS.
EXAMPLE GOAL:
A DISCOVERY TOOL WAS RECENTLY INTEGRATED WITH YOUR SITE AND YOU WANT TO SEE HOW TABLET USERS UTILIZE IT.
EXAMPLE GOAL:
A WEBSITE IS IN THE PROTOTYPE STAGE, AND YOU WANT INCORPORATE THE EXPERIENCES OF MOBILE USERS BEFORE CREATING A BETA VERSION.
GOALS DETERMINE TASKS TO TEST
A TASK IS A PROCESS THAT USER NEEDS TO ACCOMPLISH.
A TASK IS NOT A TASK SCENARIO.
“TASK SCENARIOS ARE ASSIGNMENTS THAT ARE GIVEN TO USERS.”

TASK SCENARIOS ARE WHAT ARE THE QUERIES USED IN A USABILITY TEST.
THESE ARE USED TO OBSERVE USER BEHAVIOR BY PLACING THEM IN A REALISTIC, HYPOTHETICAL SITUATION IN USING THE LIBRARY WEBSITE.
TASK VS TASK SCENARIO
TASK:
FIND THE HOURS OF THE LIBRARY WEBSITE.
TASK SCENARIO:
IMAGINE THAT YOU ARE STUDYING FOR FINALS AND NEED A SPACE TO STUDY. USING THE LIBRARY WEBSITE, DETERMINE THE LIBRARY’S HOURS.
WHO ARE YOU TESTING?
WHO IS YOUR USER BASE?
MOBILE USABILITY TESTING INHERENTLY GIVES A SET OF USERS, THOSE WHO USE MOBILE DEVICES
WHAT TYPE OF MOBILE USERS?
TABLET USERS?
SMARTPHONE USERS?
ANDROID TABLET USERS?
iPHONE USERS?
ALL OF THE ABOVE?
ANALYTICS CAN PROVIDE CLUES ON WHAT KIND OF USER IS BEST FOR USABILITY TESTING.
ANALYTICS CAN HELP CREATE A PERSONA OR A “REALISTIC REPRESENTATION” OF YOUR AUDIENCE.

EXAMPLE PERSONA:

A 19 YEAR OLD FRESHMEN STUDENT WHO IS A FIRST-TIME RESEARCHER THAT PRIMARILY USES A SMARTPHONE FOR INTERNET ACCESS.
EXAMPLE PERSONA:

A 51 YEAR OLD CONTINUING EDUCATION STUDENT WHO USES A TABLET COMPUTER PRIMARILY FOR EMAIL AND SOCIAL MEDIA.
PARTICIPANTS SHOULD BE COMFORTABLE AND FAMILIAR WITH THE DEVICE THAT THE TEST IS CONDUCTED ON.
IF THEY ARE USING A DEVICE THEY ARE NOT FAMILIAR WITH, THIS COULD TAINT THE TEST.
YOU MAY FIND PROBLEMS WITH THE HARDWARE RATHER THAN THE WEBSITE.
HOW MANY USERS TO TEST?
LITERATURE SUGGESTS 5 USERS FOR A COGNITIVE WALKTHROUGH USABILITY TEST.

LABORATORY TESTING VS FIELD TESTING
THERE ARE TWO TYPES OF TESTING: LABORATORY TESTING AND FIELD TESTING.
WHAT IS LABORATORY TESTING?
A LABORATORY TEST IS CONDUCTED IN A CONTROLLED ENVIRONMENT.
IN A LAB TEST, DEVICES MAY BE PROVIDED BY THE PROCTORS.
NETWORK ACCESS IS READILY AVAILABLE.
WHAT IS FIELD TESTING?
FIELD TESTING IS CONDUCTED OUTSIDE THE CONTROL OF A LAB FOR MORE REALISTIC RESULTS.
THE USER MAY HAVE TO CONFIGURE THEIR OWN NETWORK CONNECTION.
FIELD TESTING CONTAINS THE DISTRACTIONS OF THE REAL WORLD.
TEST COMPONENTS
METRICS
METRICS MEASURE USER INTERACTIONS WITH THE APPLICATION.
TASK TIMING
NUMBER OF TAPS TO COMPLETE A TASK
SUCCESS/FAILURE RATE
TALK ALOUD PROTOCOL (TAP)
CONDUCTING THE TEST
PROCTORING THE TEST
THERE SHOULD BE A LEAD TESTER, AND ADDITIONAL SUPPORT SUCH AS NOTE TAKER.
THE PROCTOR WILL CONDUCT THE TEST.
THE PROCTOR CANNOT ANSWER QUESTIONS, SO NOT TO LEAD THE PARTICIPANT.
A NOTE TAKER(S) SHOULD ALSO BE PRESENT.
DIGITAL RECORDING IS BEST.
WHERE TO TEST
LAB TESTING:
A CLOSED CONFERENCE ROOM.
NO DISTRACTIONS, PARTICIPANT CAN FOCUS IN A QUIET ROOM.
ADDITIONAL EQUIPMENT CAN BE USED, SUCH AS A MONITOR TO TRACK NAVIGATION.
EASIER TO RECORD RESULTS
IN A LAB TEST
LAB TESTING ALLOWS INCORPORATION OF OBSERVERS
EASIER TO INCORPORATE OBSERVERS THROUGH GOOGLE HANGOUTS, CLOSED CIRCUIT FEED, OR SKYPE IN A LAB TEST.
FIELD TESTING
FIELD TESTING WOULD BE ANYWHERE THEY COULD USE A MOBILE DEVICE.
FIELD TESTS CAN BE CONDUCTED IN LINE AT THE CIRCULATION DESK, A CAFE, OR IN THE STACKS
THE DOWNSIDE OF FIELD TESTING IS THAT IT IS HARDER TO CAPTURE RESULTS
NETWORK ACCESS MAY BE SPOTTY IN A FIELD TEST.
WHEREVER YOU TEST, MAKE SURE IT MEETS INSTITUTIONAL REQUIREMENTS.
IRB TESTING AND APPROVAL
FUNDING FOR INCENTIVES
SCHEDULING
SCHEDULING PARTICIPANTS CAN BE DIFFICULT
ONLINE SURVEYS, DOODLE POLLS, AND GOOGLE CALENDAR CAN BE USED TO FACILITATE SCHEDULING.
ONLINE SURVEYS CAN BE USED TO SCREEN PARTICIPANTS.
THE ONLINE SURVEY CAN ALSO BE USE TO DETERMINE A USER’S PREFERRED DEVICE.
PARTICIPANTS MAY CANCEL LAST MINUTE OR NOT SHOW UP AT ALL.
TECHNICAL SETUP
TOOLS TO CAPTURE THE TEST
SCREEN CAPTURE SOFTWARE
CAMERAS
DOCUMENT SCANNERS
DIGITAL MP3 RECORDERS
FREE TOOLS:
QUICKTIME (MAC OS X ONLY) FOR SCREEN CAPTURE

AUDACITY FOR AUDIO CAPTURE

PHOTOBOOTH (MAC OS X ONLY) FOR PARTICIPANT CAPTURE
PROPRIETARY TOOLS:
CAMTASIA (SCREEN AND WEB CAM CAPTURE)

MORAE (USABILITY SUITE)

REFLECTOR (MOBILE DEVICE SCREEN CAPTURE)
OBSERVERS
OBSERVERS SHOULD BE HIDDEN FROM PARTICIPANTS.
OBSERVERS COULD BE OTHER STAKEHOLDERS.
OBSERVERS CAN TAKE NOTES AND OFFER DIFFERENT PERSPECTIVES.
USABILITY EXERCISE
1. FIND A PARTNER OR CREATE A TRIO

2. TEST EACH OTHER’S WEBSITES ON A MOBILE DEVICE

3. DISCUSS FINDINGS
DATA ANALYSIS
METRICS AND TAP RESPONSES CREATE PATTERNS AND IDENTIFY PROBLEMS.
RE-DESIGN THE SITE TO SOLVE THOSE PROBLEMS.
RE-TEST TO DETERMINE HOW WELL THAT WORKS OUT
CONCLUSION
QUESTIONS?
THANKS!