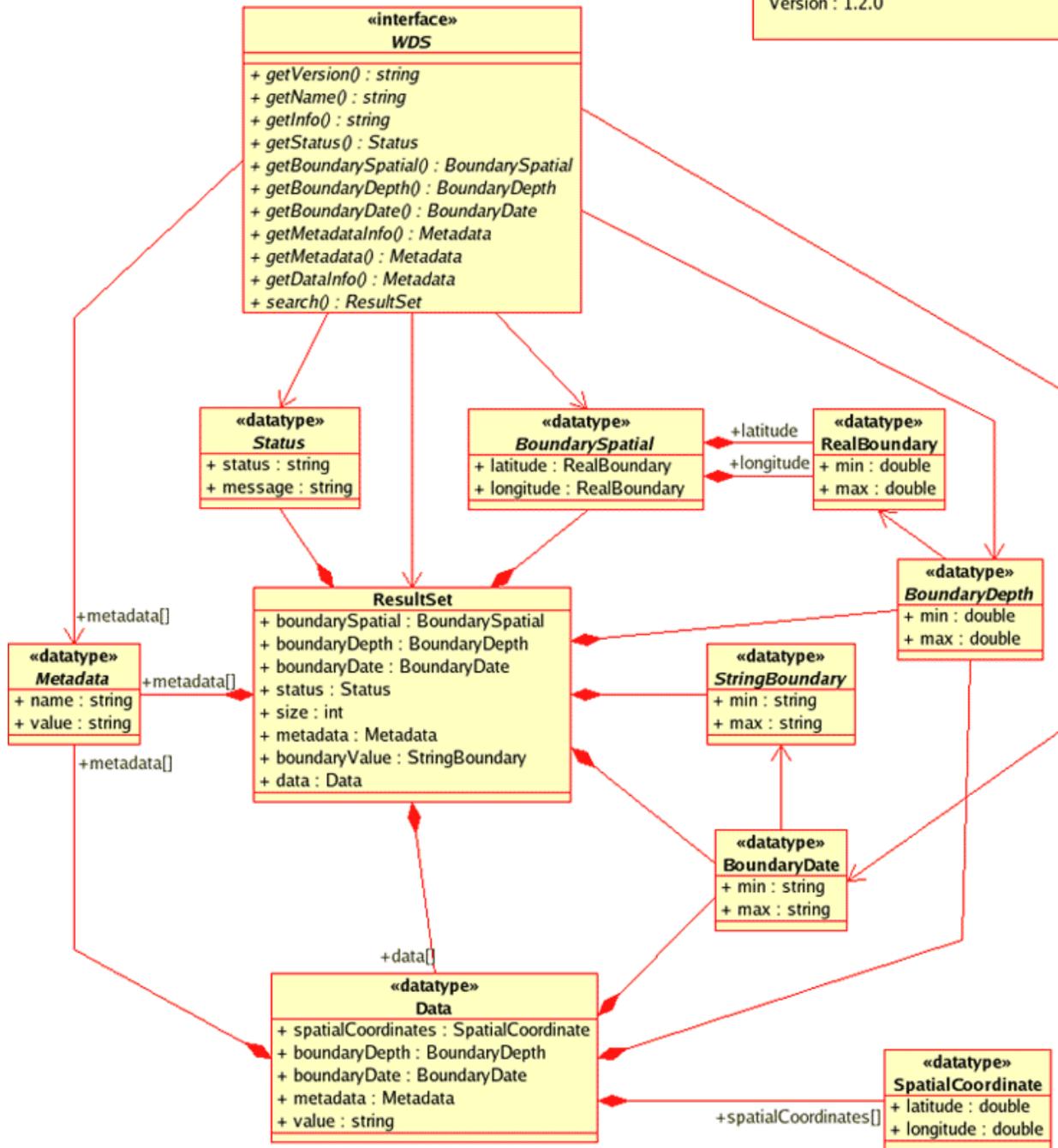


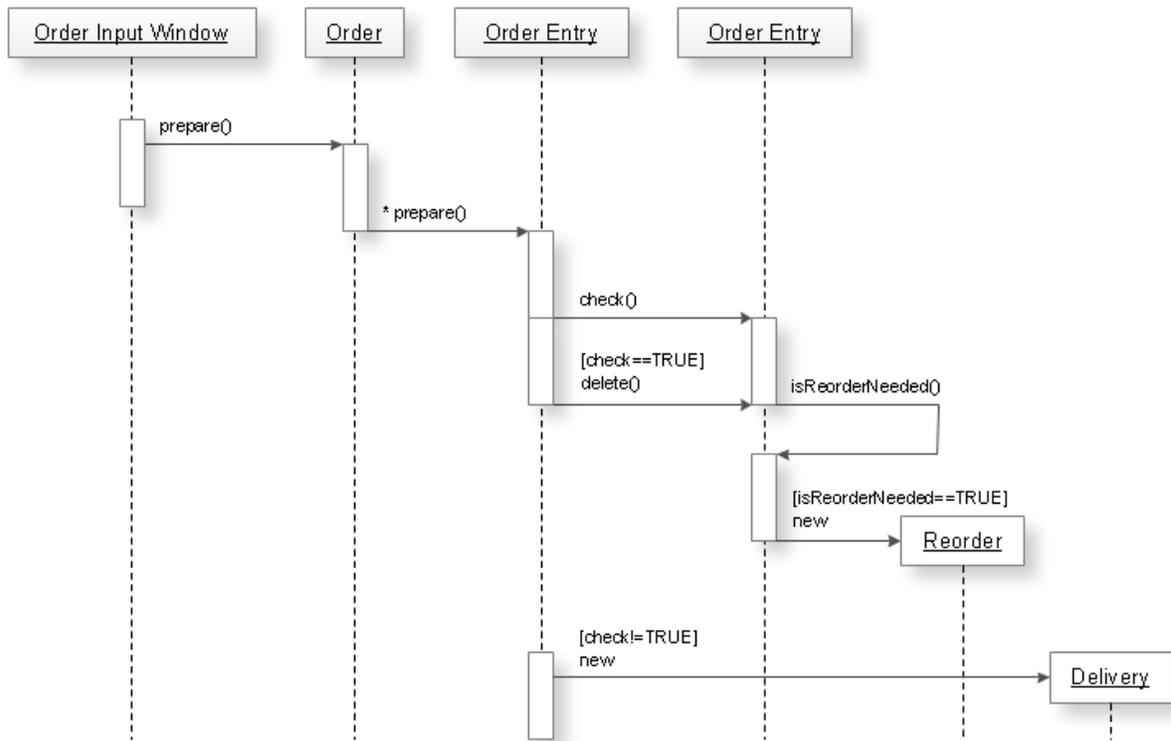
1. What is the max baud rate on the iPAQ?
2. What version of OS was on the iPAQ?
3. What is the newest .net compact?
4. The RUP is a process made by whom?
5. What are the four phases of the RUP?
6. With serial communications and c#, which syntax opens a created serialport
7. What are the default ports of input/output Bluetooth for the iPAQ
8. What are the different com ports on the iPAQ and what do they do?
9. What class is used for most .Net IO
10. What is the URL for Dr. Povinelli's web site
11. The baud rate for iPAQ is \_\_\_\_\_ bit/s while for Vex Microcontroller is \_\_\_\_\_
12. For a threaded application, what method that we need to call to execute a certain function within the code?
13. Name the three common characteristics of embedded systems.
14. Name three key technologies for embedded systems.
15. DomainUpDown Control is supported by the .NET Compact Framework. T / F
16. When you open a serial port to send data back and forth, it is recommended that you close the port connection after you are done with the process. T / F
17. \_\_\_\_\_ is the name of an ad-hoc Bluetooth network formed by a master and its slave(s).
18. Instead of closing the application, the X icon in the top right corner of a Pocket PC form, by default,
19. RUP promotes what practices?
20. What was the first smart mobile computing device created in April of 1981?
21. Unlike Unicast, Multicast sends information into group(s) and the information is shared to all IP addresses that are associated to the group. True or False?
22. The range of multicast addresses is only from 224.0.0.0 through 239.255.255.255. True or False?
23. What is a thread?
24. Unlike Modeless Windows Form, Modal Windows Form requires command to close the form before executing the rest of the application. True or False?
25. In C#, Which two methods are used to display Modal Windows Form?
26. Which of the following diagrams represent Sequence Diagram?

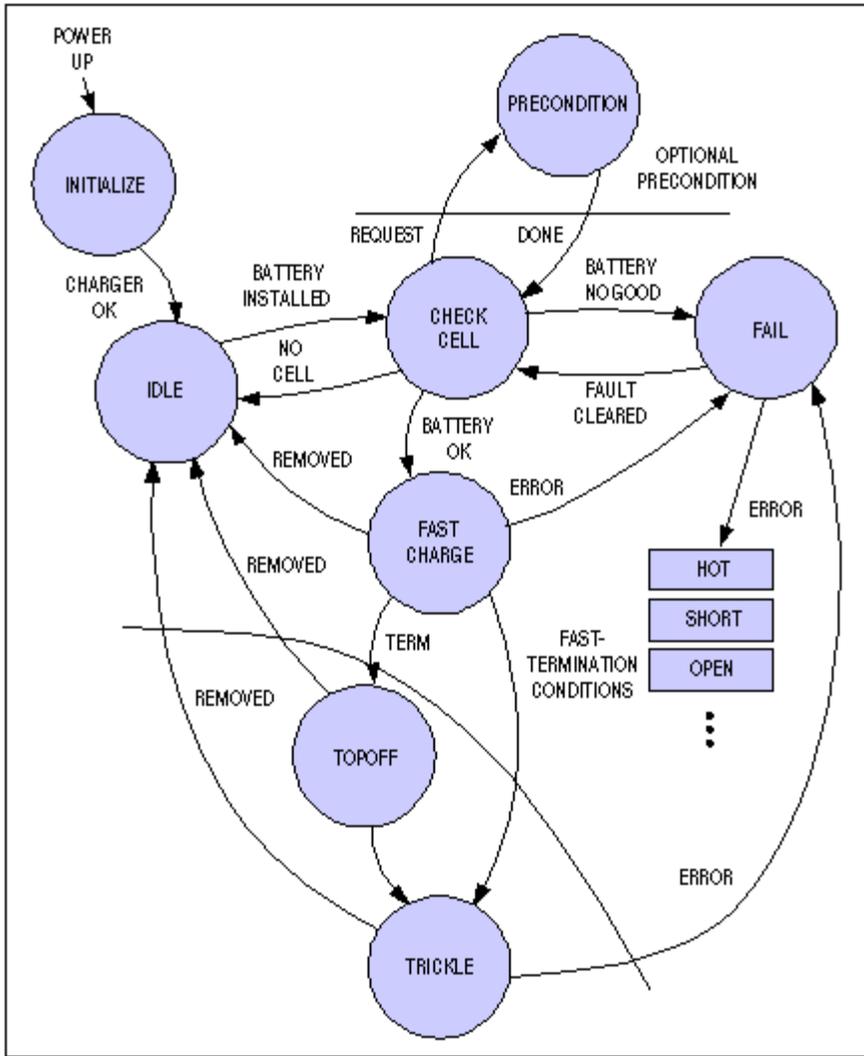
a)

Date de création : 2006/01/04  
Date de modification : 2006/03/15  
Version : 1.2.0



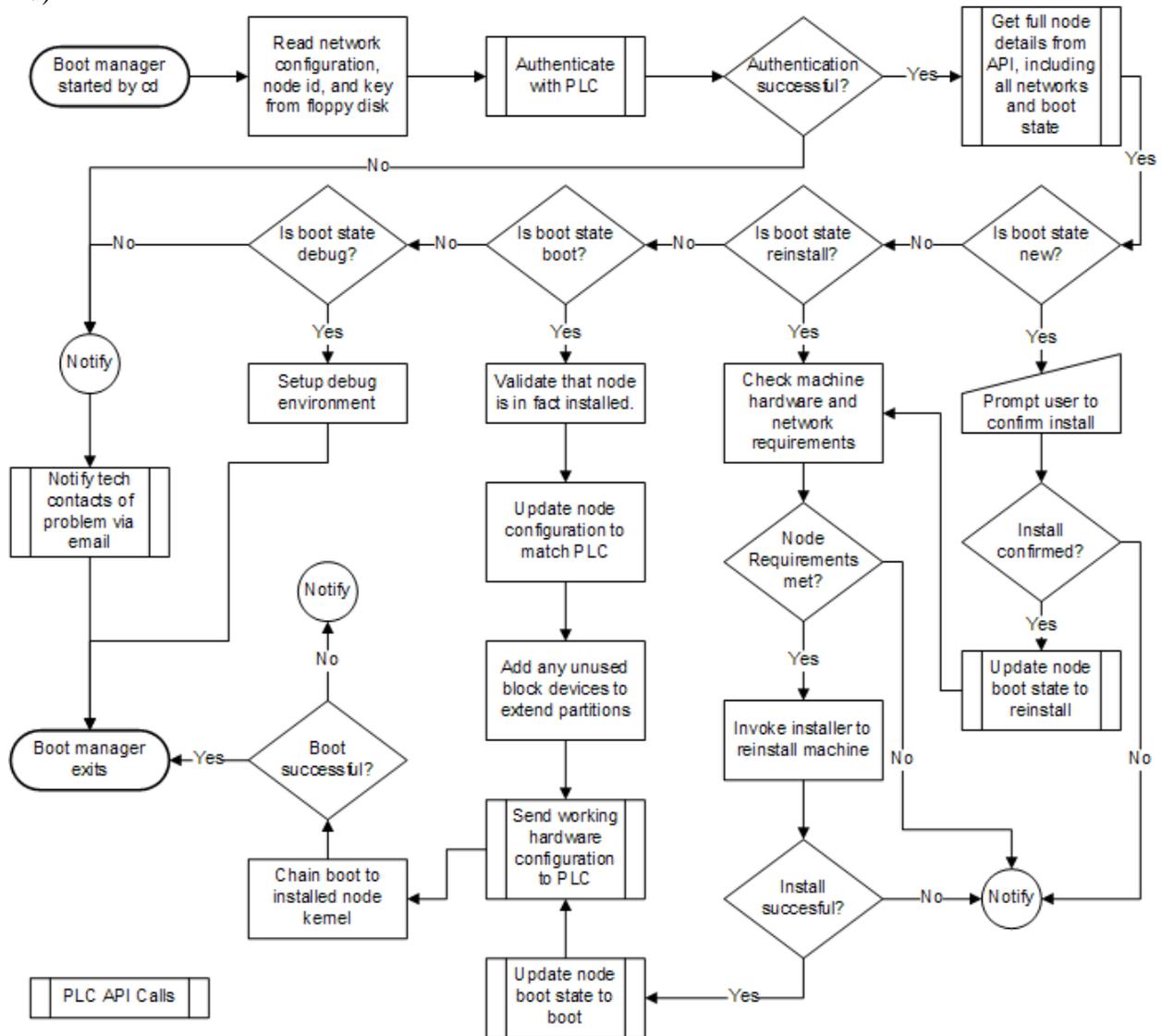
b)





c)

d)



27. Wireless routers on 802.11b/g does not interfere with Bluetooth devices that share the same band because...
28. 802.11b wireless connection operates at which of the following frequencies?
29. Windows Mobile's operating system is a family of Windows CE operating system. True or False?
30. The latest available Windows Mobile version is version?
31. What is an embedded system and what are some examples?
32. What is Moore's Law and how does it relate to embedded systems?
33. What is a piconet?
34. What are three common characteristics of embedded systems?
35. What is the difference between managed code and native code?
36. How do wireless web cams work?
37. Why can iPaq's not be used for controlling the vex robots?

38. What is RUP and what are the four phases?
39. What were the four projects developed this semester?
40. What did the eyeRobot say during the presentation?
41. In general, why is Bluetooth a more secure wireless protocol than standard 802.11?
42. True or False, there are more embedded systems produced yearly than desktop systems.
43. Briefly describe the R.U.P and its four project lifecycle phases.
44. What is the primary purpose of Bluetooth?
45. What were two networking methods used in the class projects to communicate between devices?
46. True or False: The .NET Framework supplies garbage collection.
47. Draw a picture showing the .NET compact framework execution environment structure
48. What does Moore's Law state?
49. Approximately how many transistors did a leading edge chip in 2002 contain?
50. Name and explain some common design metrics for embedded systems.
51. What namespace (class) is used for Bluetooth in c#?
52. What is the ideal range for Bluetooth connectivity?
53. What is the name of the Java API for Bluetooth?
54. What is a piconet?
55. What are the advantages of using iterative RUP?
56. Where did Povinelli travel for 2 weeks this semester?
57. True or False: The .NET Compact Framework does not include classes that provide managed access to the serial port on a smart device.
58. What is Bluetooth primary meant for?
59. In Bluetooth what does PAN stand for and mean?
60. What is Moore's Law?
61. How many active devices can a piconet contain?
62. True or False? The .NET framework supported a serial port interface starting with version 2.0.
63. What is the purpose of the Invoke method for C#?
64. What is the difference between a phase and a cycle in RUP?
65. True or False? Windows Mobile 2003 comes with its own JVM
66. What is the purpose of Bluetooth profiles?
67. What are the advantages of Bluetooth profiles?
68. What are the disadvantages of Bluetooth profiles?
69. Why can't the iPAQ connect directly to the VEX Robot?
70. What are the advantages of using C# over Java when programming for the iPAQ?
71. Briefly discuss the advantages and disadvantages to using multiple threads in an application.
72. List at least two ways to test an embedded system.
73. Describe what is meant by a real-time embedded system?
74. Which one of these is NOT a characteristic of a real-time embedded system?
75. Explain the difference between unicast, broadcast, and multicast communication.
76. How does test an application on a pc differ from on an embedded system?
77. What is an NMEA sentence and how does it relate to GPS systems?
78. What is JIT compilation and how is it used by the .NET Compact Framework?
79. Personal computer systems are the most type of computer used today. T/F

80. Like TCP, UDP guarantees packet delivery and ordering from one endpoint to another.  
T/F
81. In C#, what method can you use to communicate with a single object from multiple threads?
82. Asynchronous clients and servers can...
83. True or false: Both TCP and UDP allow multicast delivery.
84. In general, why is software development for an embedded system difficult? List two reasons.
85. List four of the important metrics that are particularly important to embedded systems.
86. There are three types of sentences in Bluetooth.
87. True or false: All Bluetooth devices on the same piconet are synchronized to the same clock.
88. Briefly describe what a typical GPS sentence might look like. (Hint: begin character, syntax, ending characters etc...)
89. True or false: GPS sentences are broadcasted via a Bluetooth Ethernet connection
90. What are the three advantages of incremental design?
91. How might your project benefit from the use of event listeners and handlers?
92. What were the difficulties encountered when attempting to integrate the iPAQ and VEX robots?
93. What are the four phases of the Rational Unified Process?
94. What is the main difficulty in using Bluetooth devices with the .NET framework? How did some or all teams work around this deficiency?
95. Why did security camera group have to switch from the iPAQ to a laptop?
96. What does NMEA stand for?
97. Does the NMEA standard only apply to communication with GPS equipment?
98. How many GPS satellites are required to obtain a fixed point?
99. What is the orbital period of a GPS satellite?
100. What prevented the groups from using Java for their projects?
101. What does RUP stands for?
102. Who developed RUP?
103. What are the 4 phases of RUP?
104. What are the outcomes of inception phase?
105. What are the outcomes of elaboration phase?
106. What are the outcomes of construction phase?
107. Name the milestones of the 4 RUP phase.
108. If a Bluetooth system has a range of 30 meters, power of 2.5mW, and 4dBm power ratio. What class is this Bluetooth system?
109. What is Personal Area Network (PAN)?
110. What does ASCII stands for?